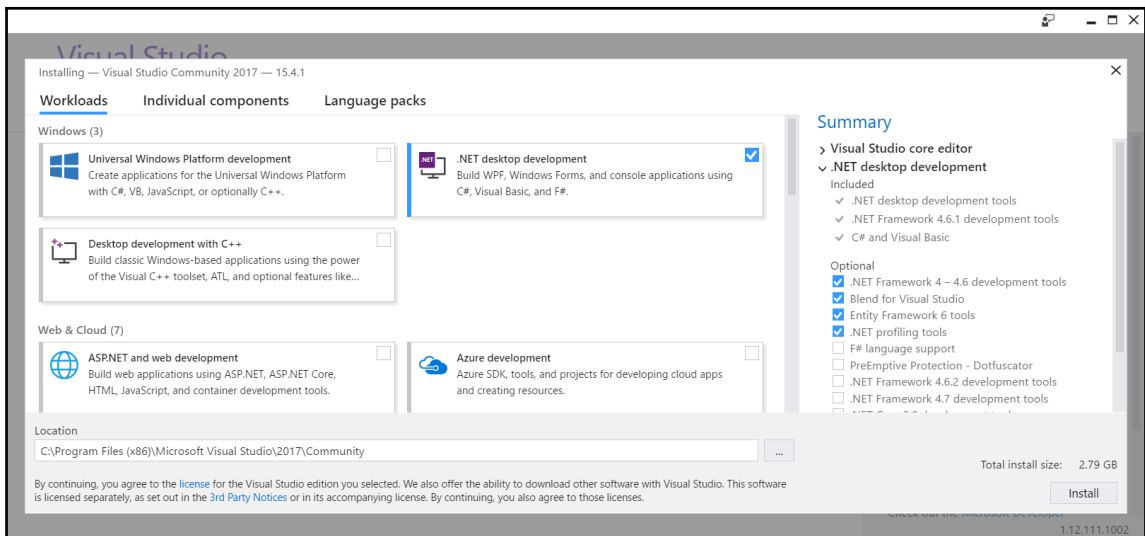
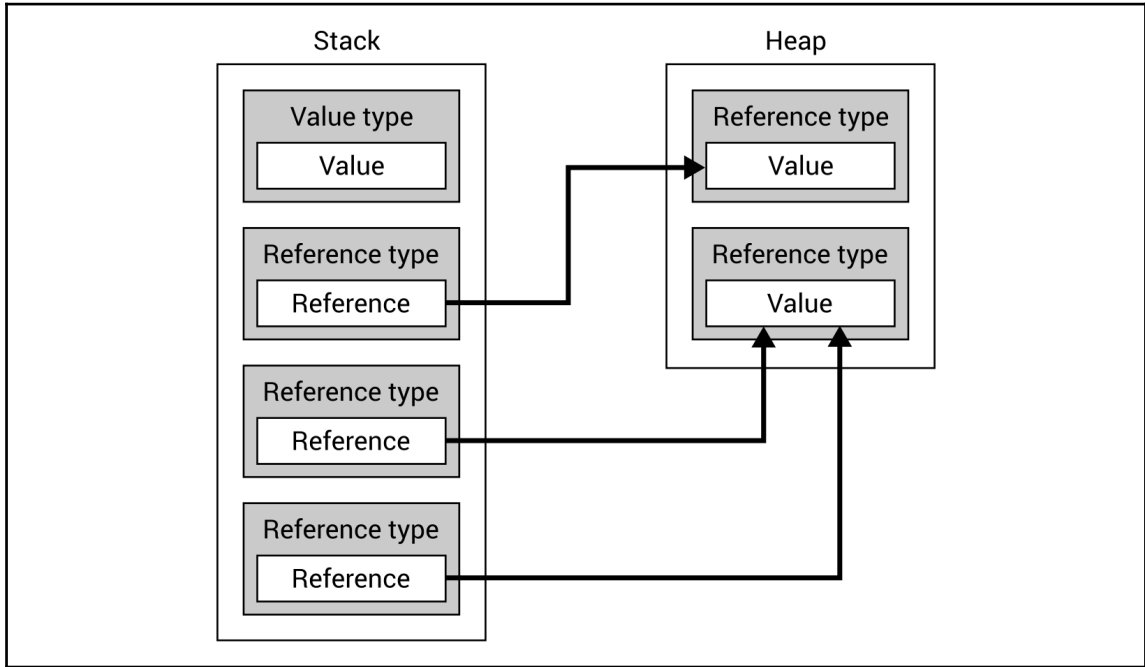
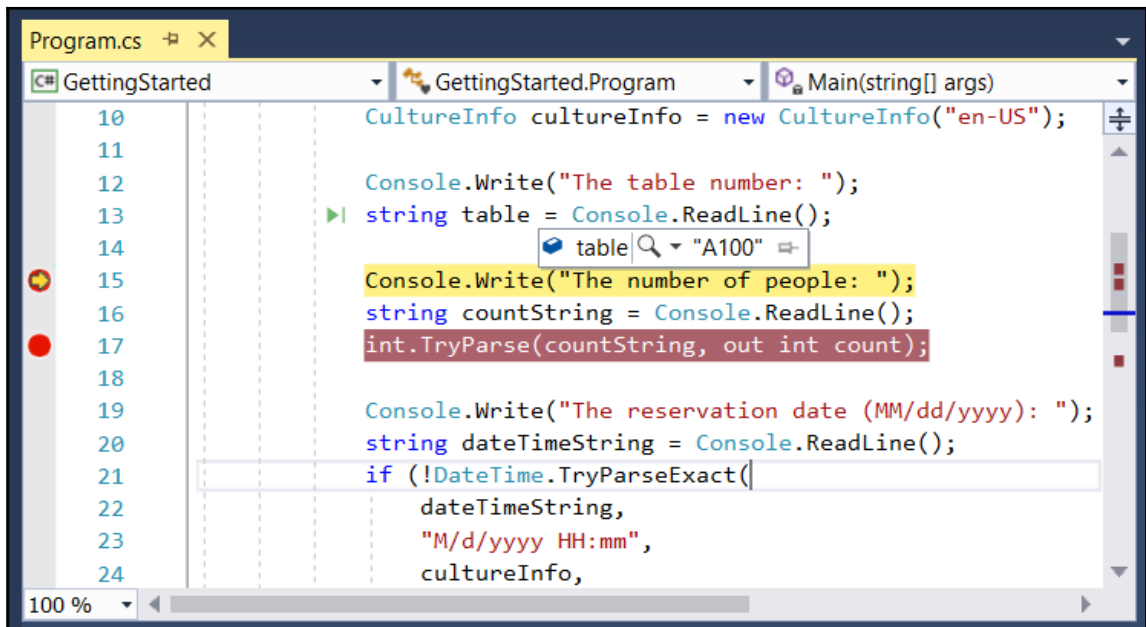
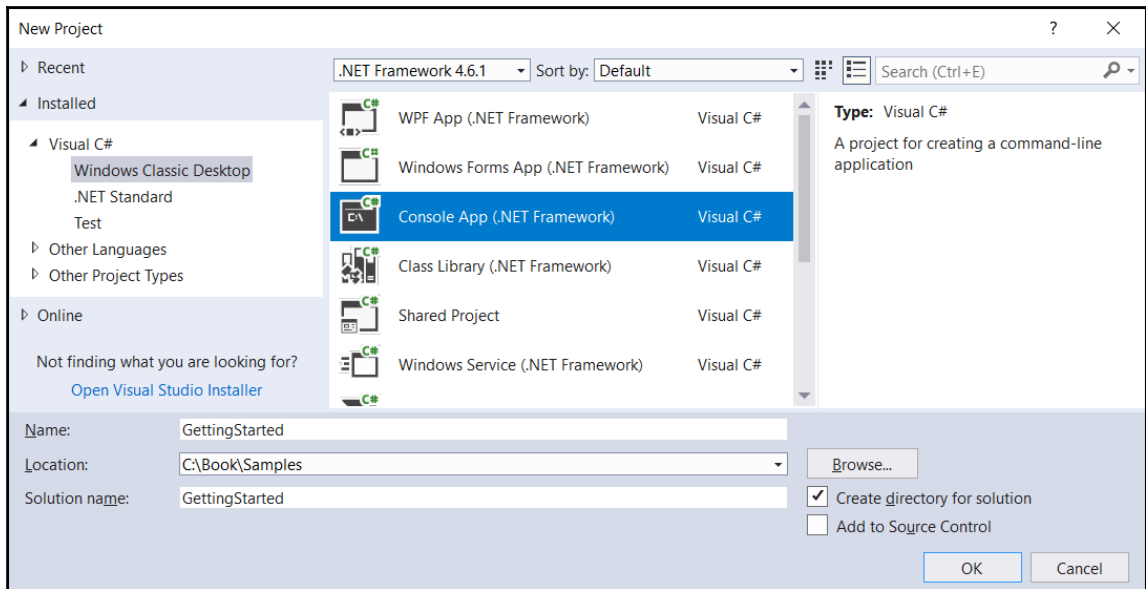
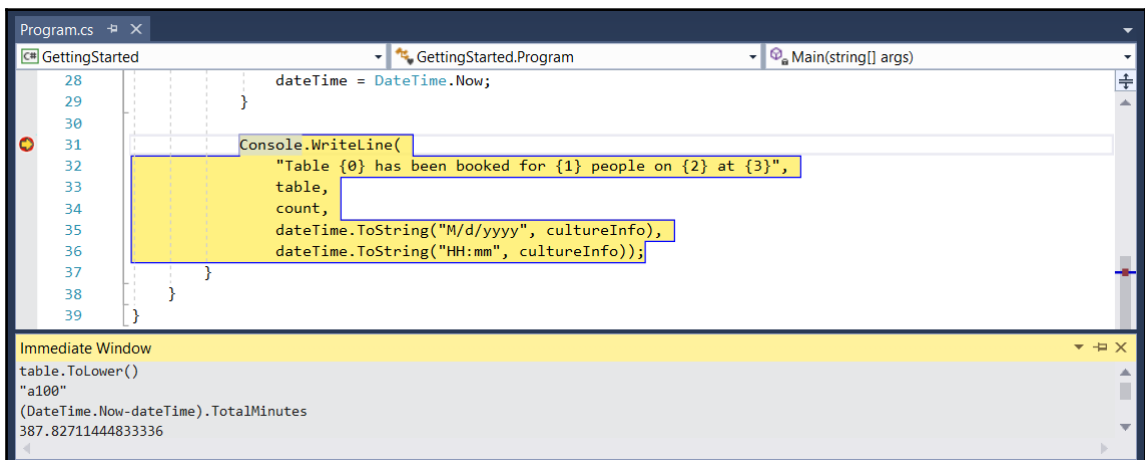
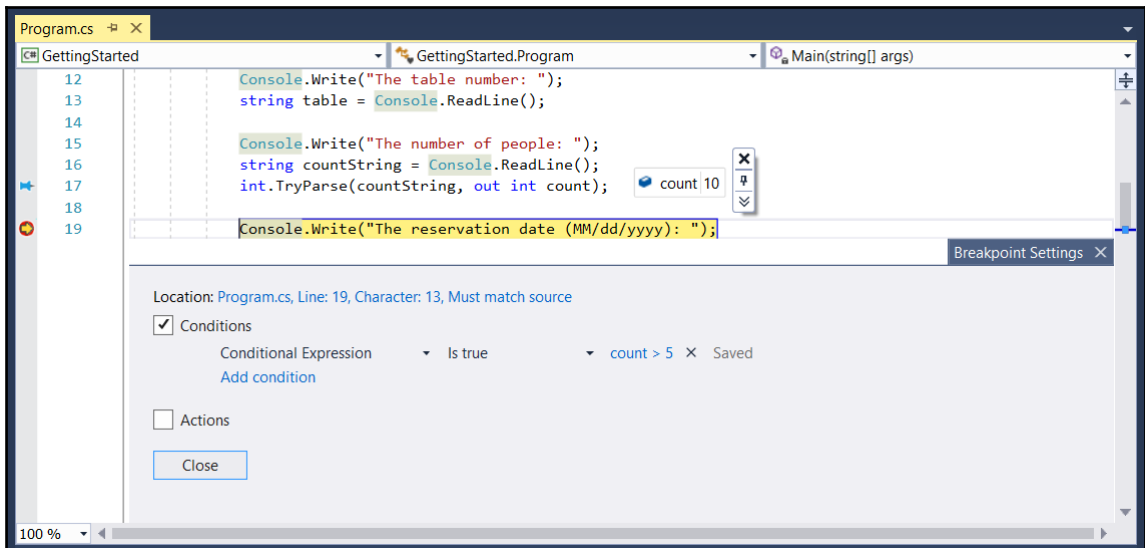


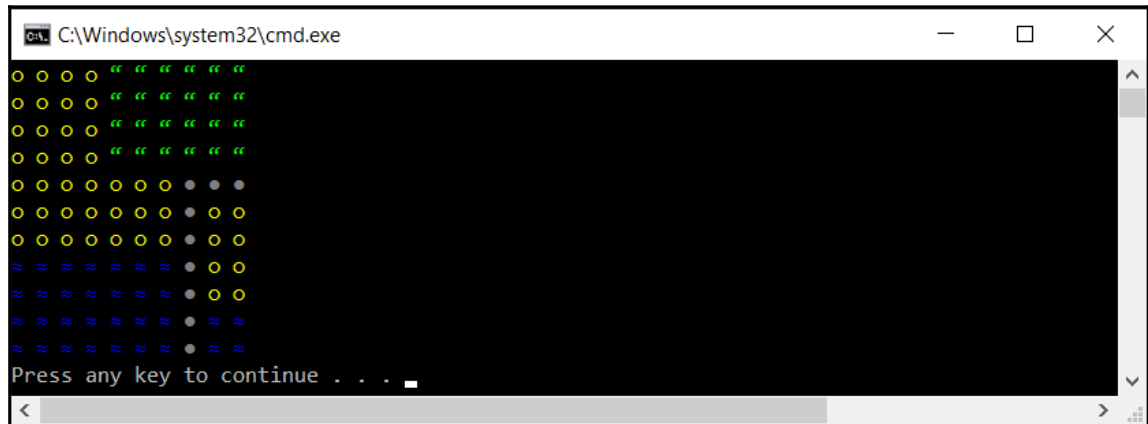
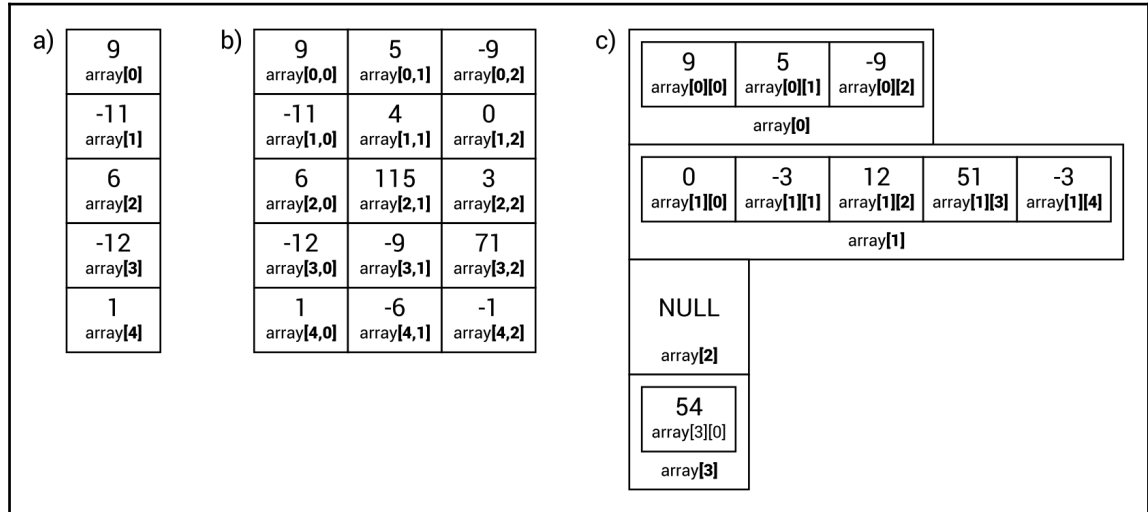
Chapter 1: Getting Started

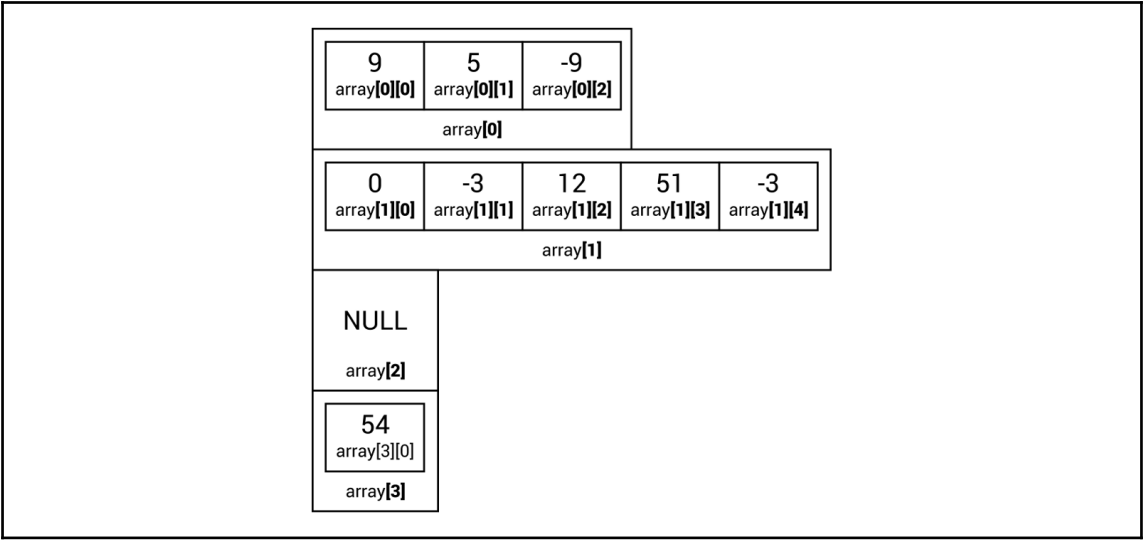




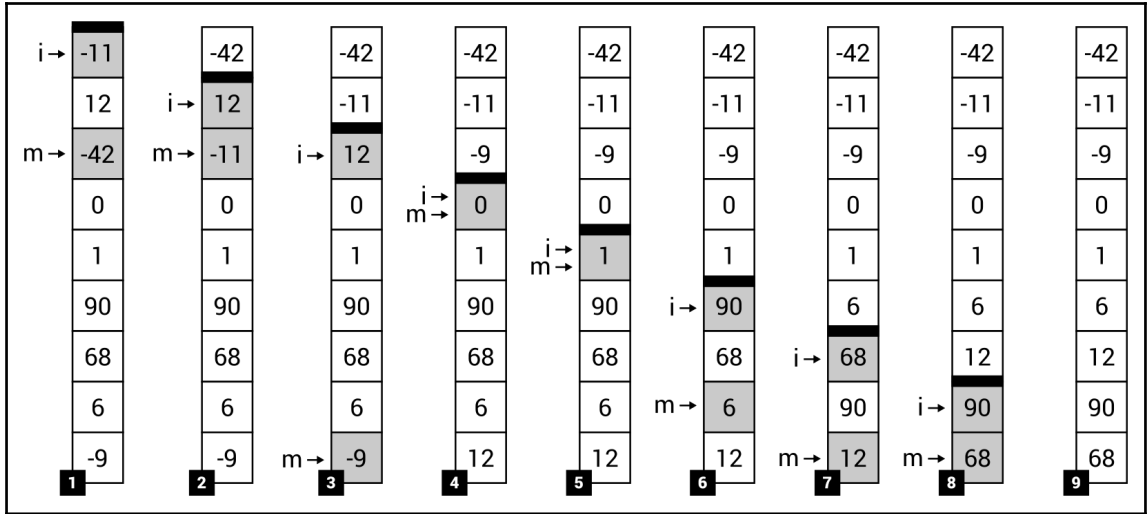


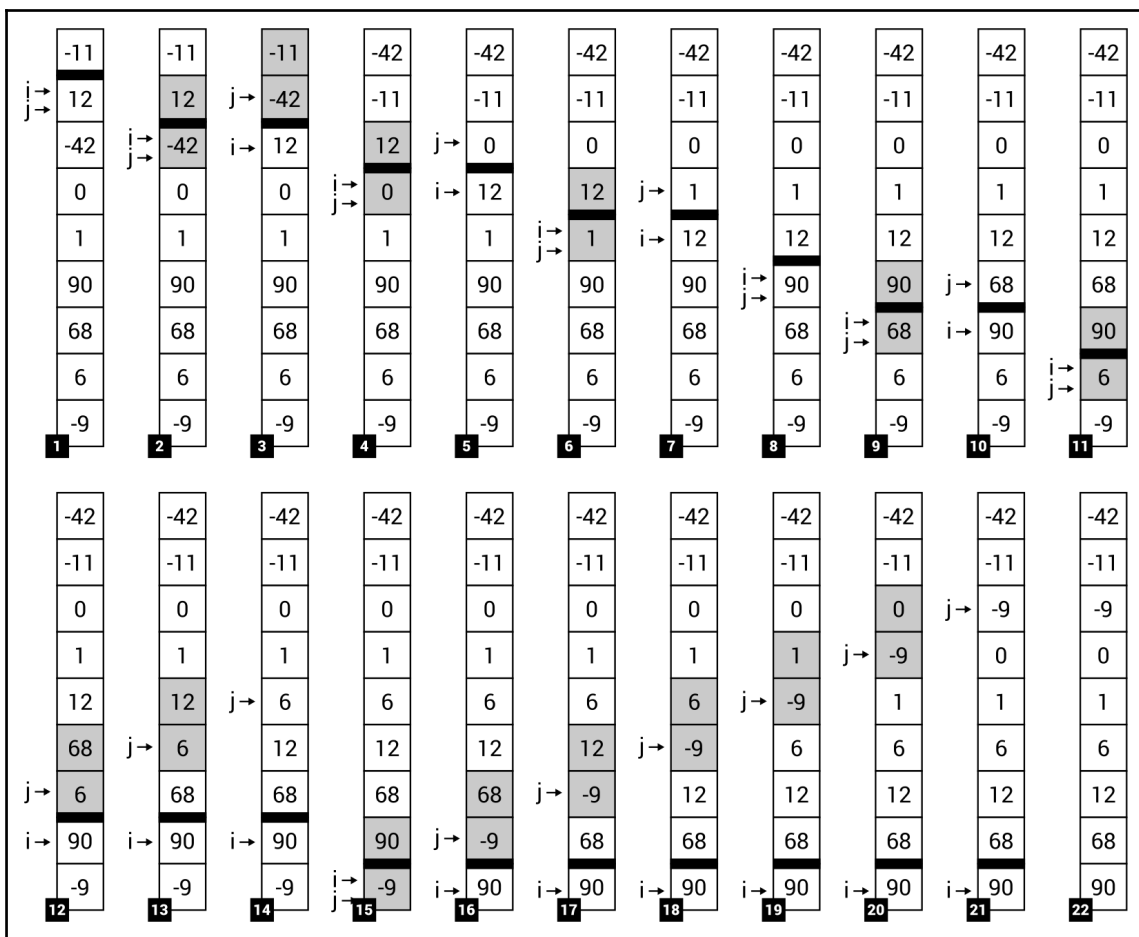
Chapter 2: Arrays and Lists

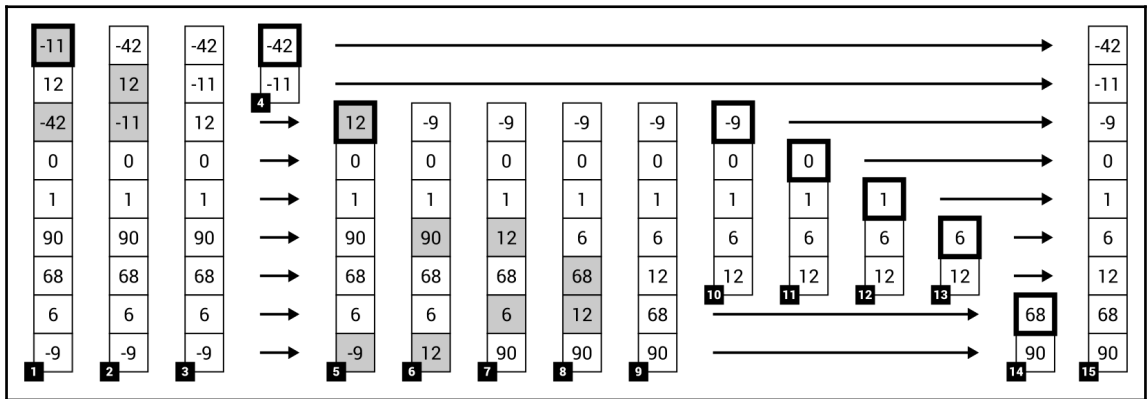
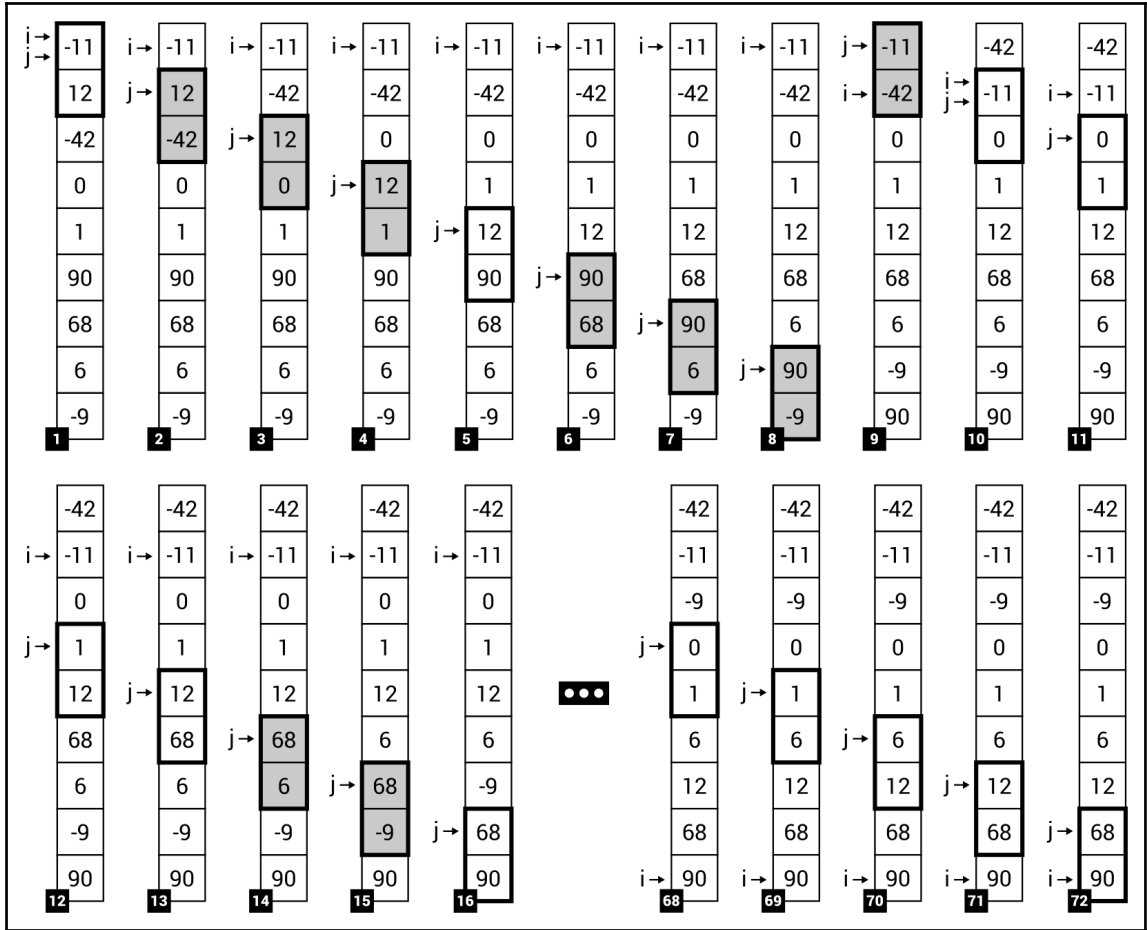


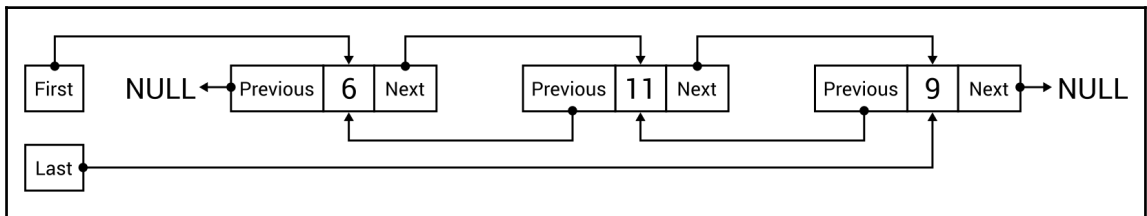
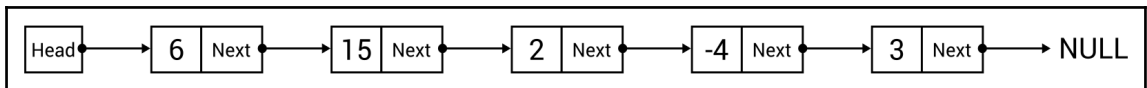
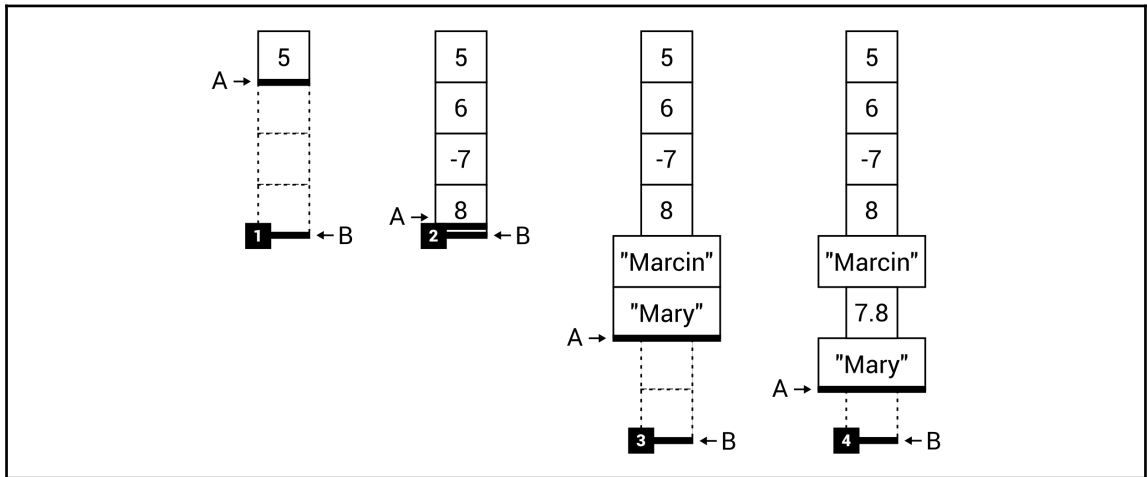
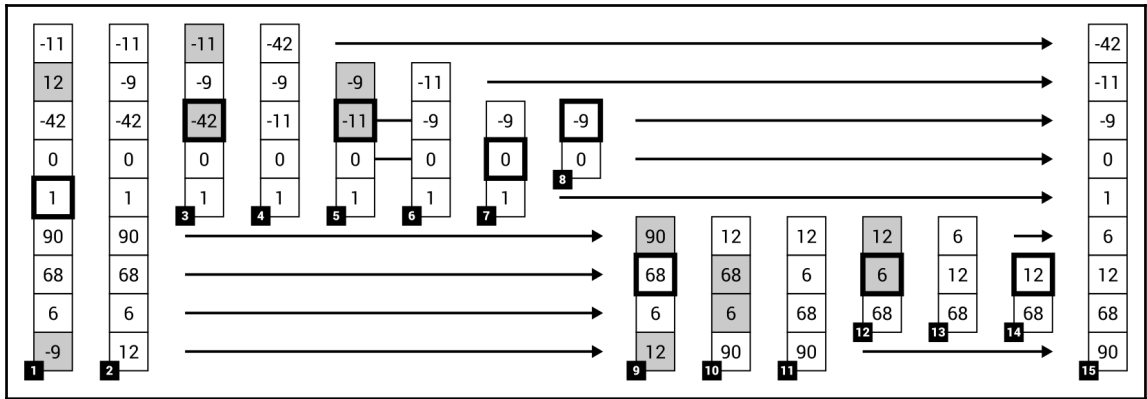


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January:  U B B W C S S U C S U B B C B U B C B S S B C U W C S B U W
February: W C C S B U B U S B U C S U B B U S B W C W U C B B S S C U U C S C B B S S
March:    U S C S W B W B S B C W C W U C B B S S C C U U C S C B S S
April:    S B W C W S B W S B S C C U S B W S U W C B C U W S S S B S
May:      W C C C S U C W U S C W W W S W C W B W U S S U B U W B B
June:     U U C W S C C B U S W U B W U W C U C C W B B U U B S B B S
July:     W W S W B S B C W W C U U U C B B C W S W W B B S B W S W B
August:   S C B S W B W C W C W U C W S B U W U W B C W C W C C W W
September: B C U B C S B S S W B C W S B B C C U C W W U B S W W
October:  B C C U U C W U S W S S W C C S W S U U C C S B S U B B B
November: U S S C S C S U B W U S C B B U W W U S U S B W S W B B W
December: B S B U U W U W S U S C B S B S W W W C C U S S W W B B B
Press any key to continue . . .
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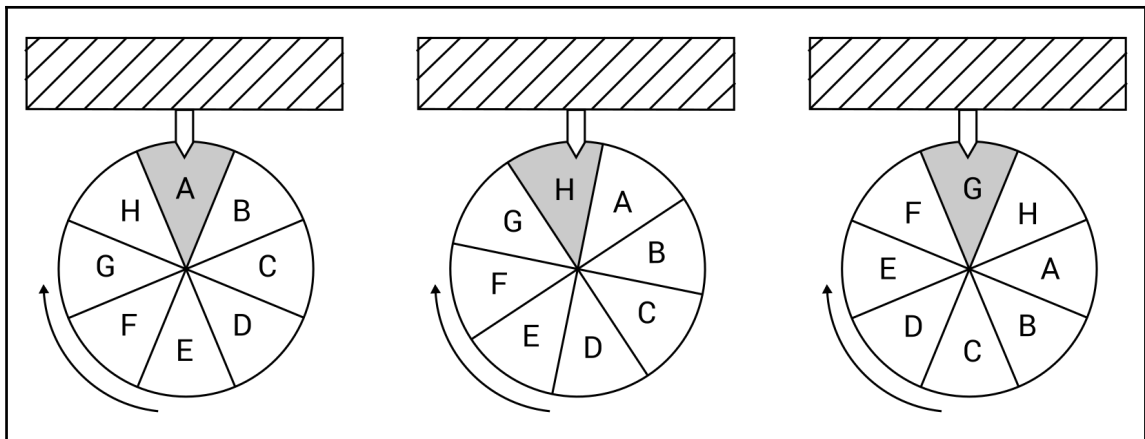
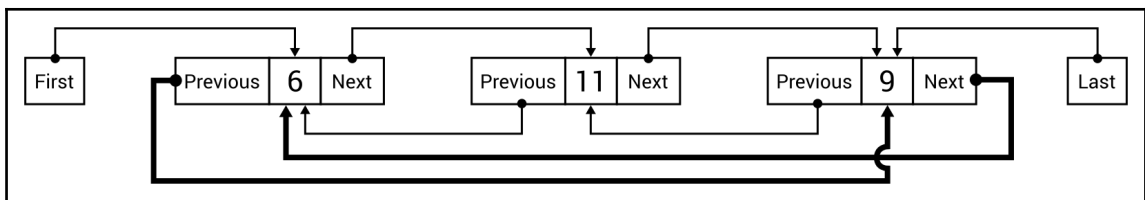


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- 3 -

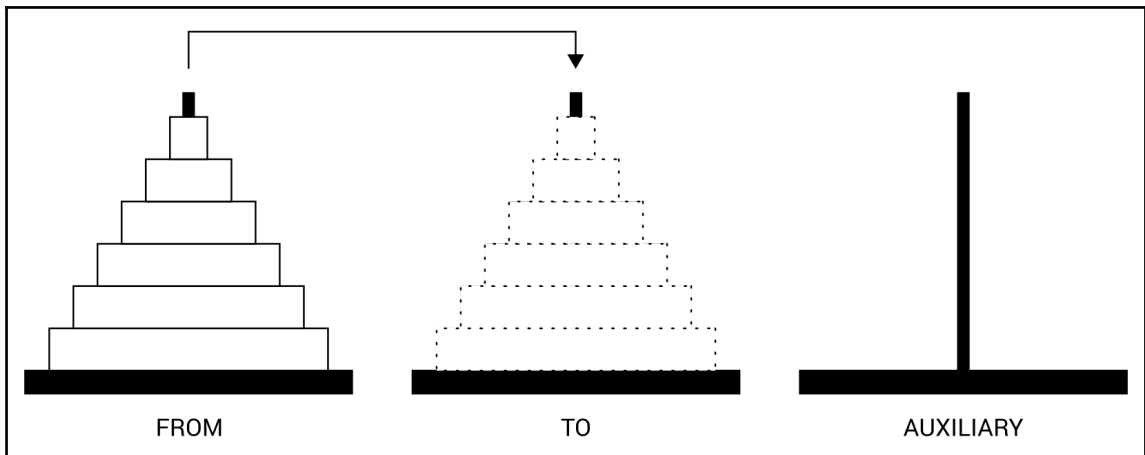
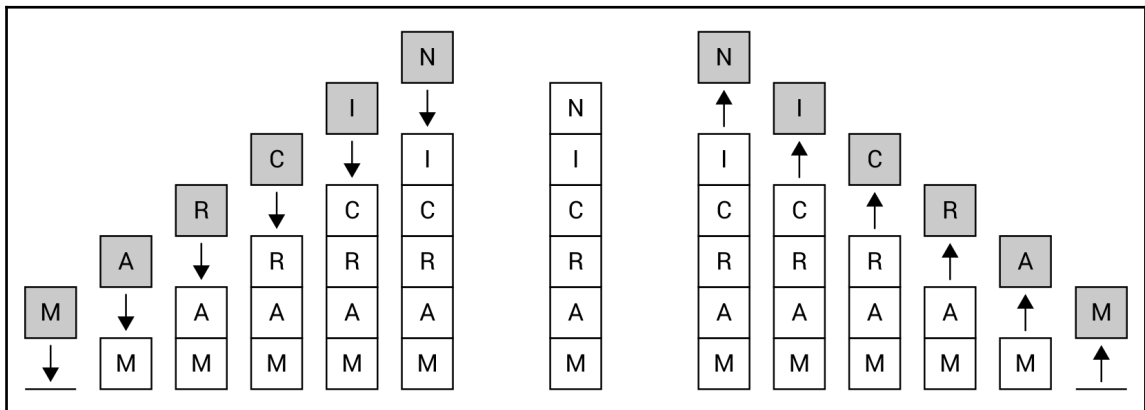
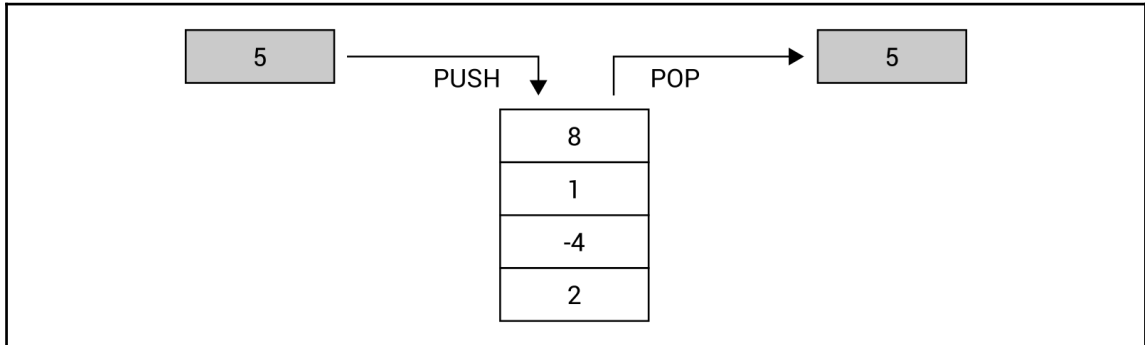
A lot of applications use various data, such as posts, photos, or just settings that allow
a user to adjust the application to his or her needs. Of course, data can be stored vario
usly, such as in textual and binary files, as well as in databases. Even a text file may c
ontain content defined in various ways, such as in plain text or formatted using Extensibl
e Markup Language (XML) or JavaScript Object Notation (JSON). Choosing the proper way of s
toring data within an application is an important task that could have an impact on the d
evelopment and maintenance of the project, as well as on the performance of saving or loadi
ng data.

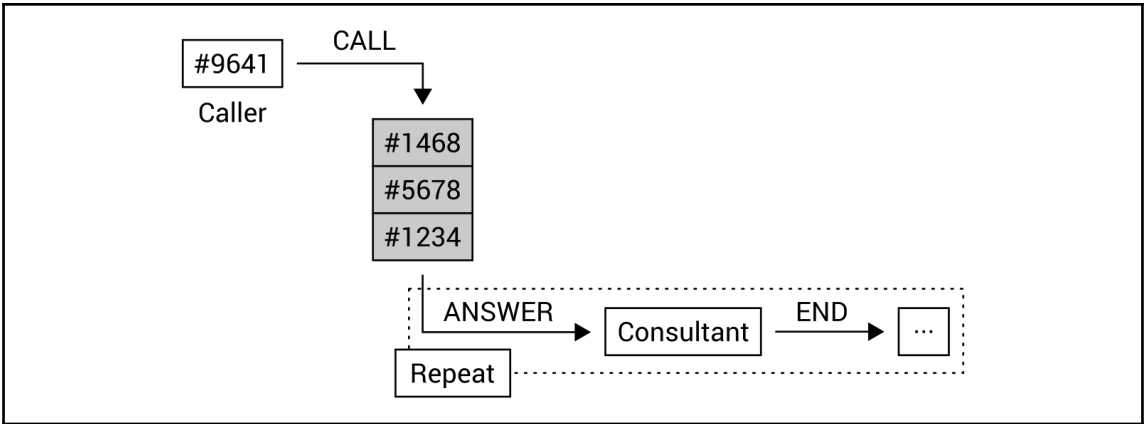
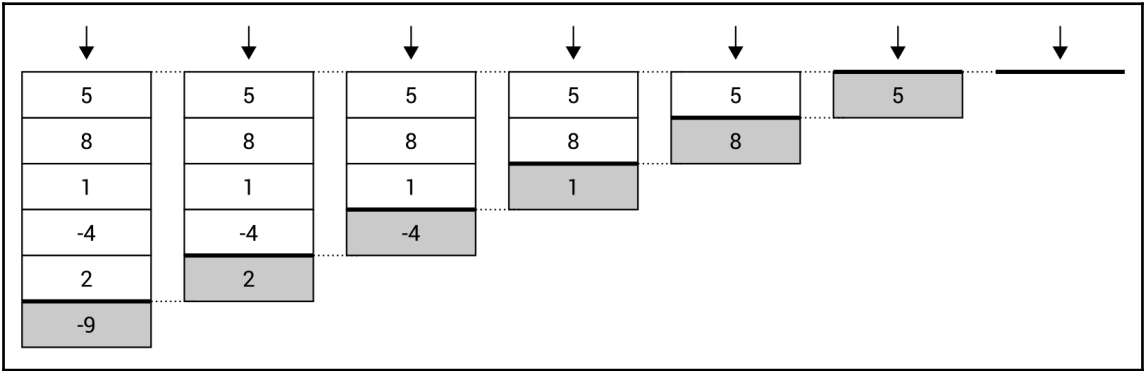
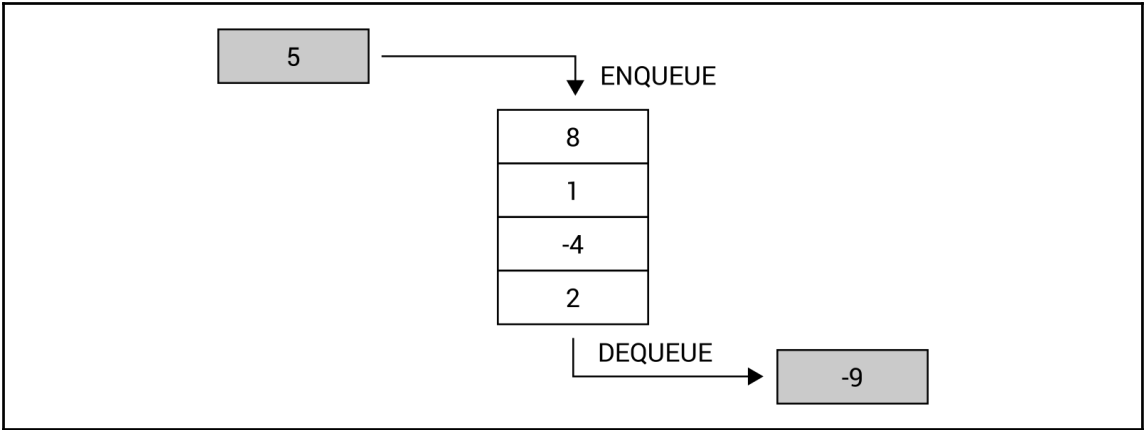
Quote from "Windows Application Development Cookbook" by Marcin Jamro,
published by Packt Publishing in 2016.

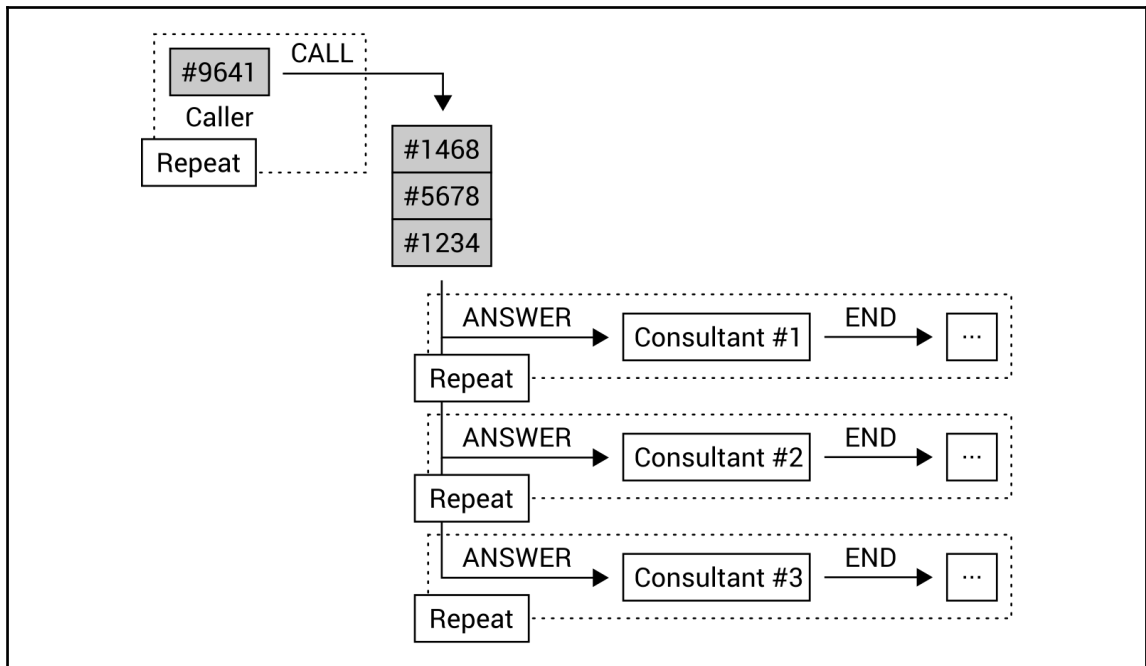
< PREVIOUS [P] [N] NEXT >
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Chapter 3: Stacks and Queues

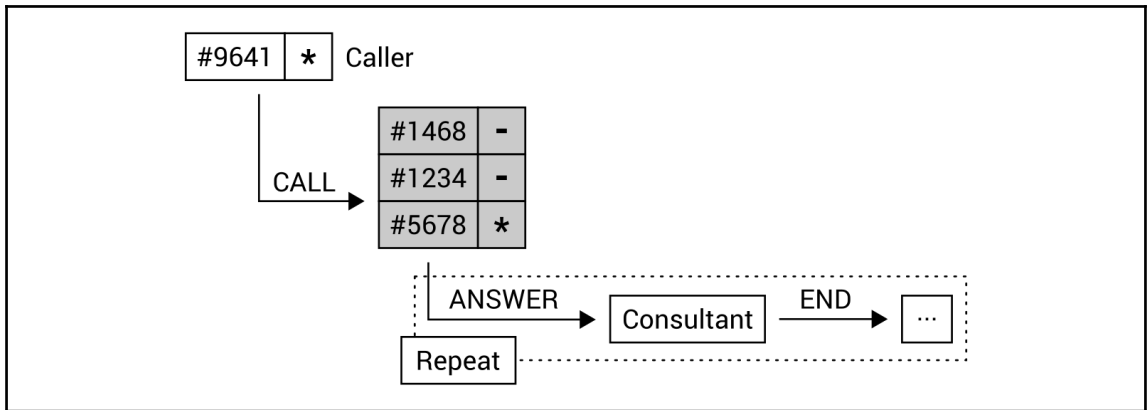
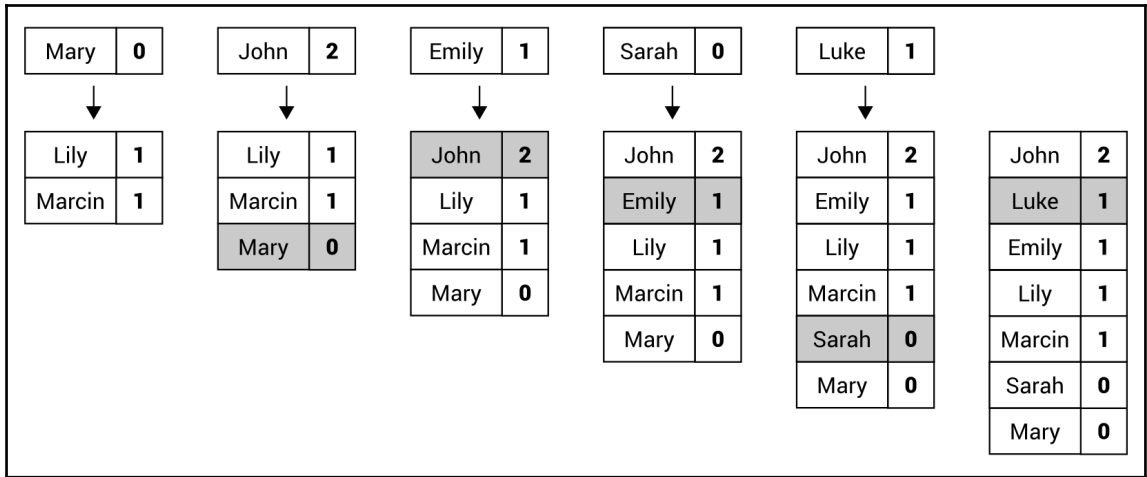




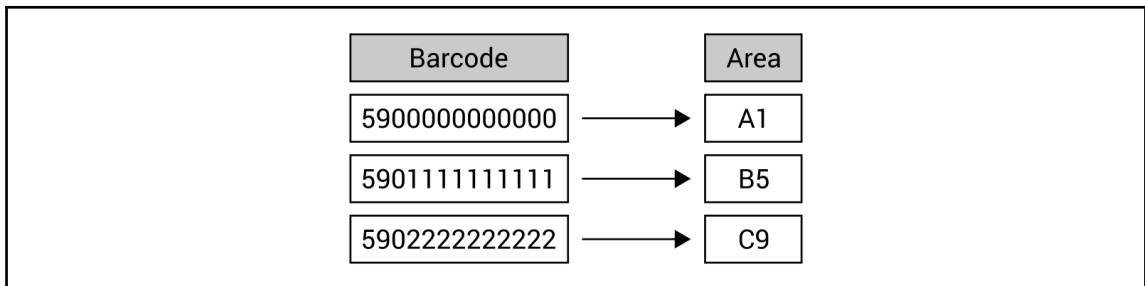
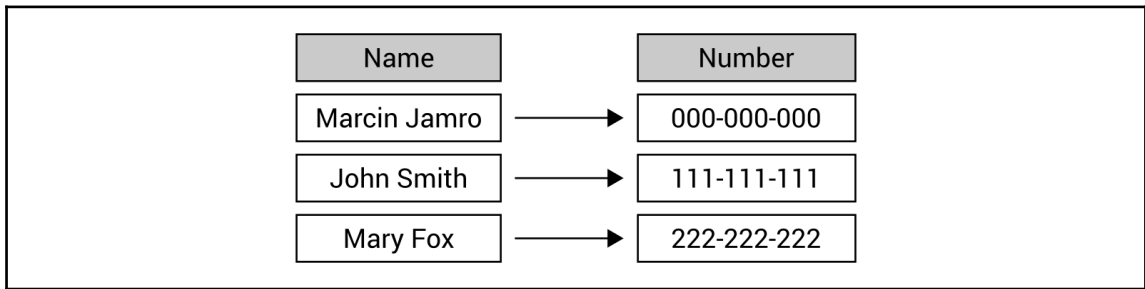
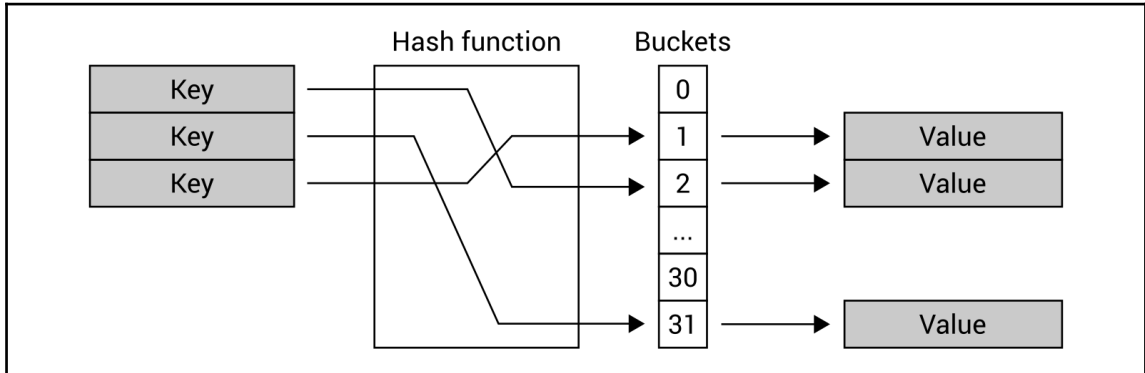


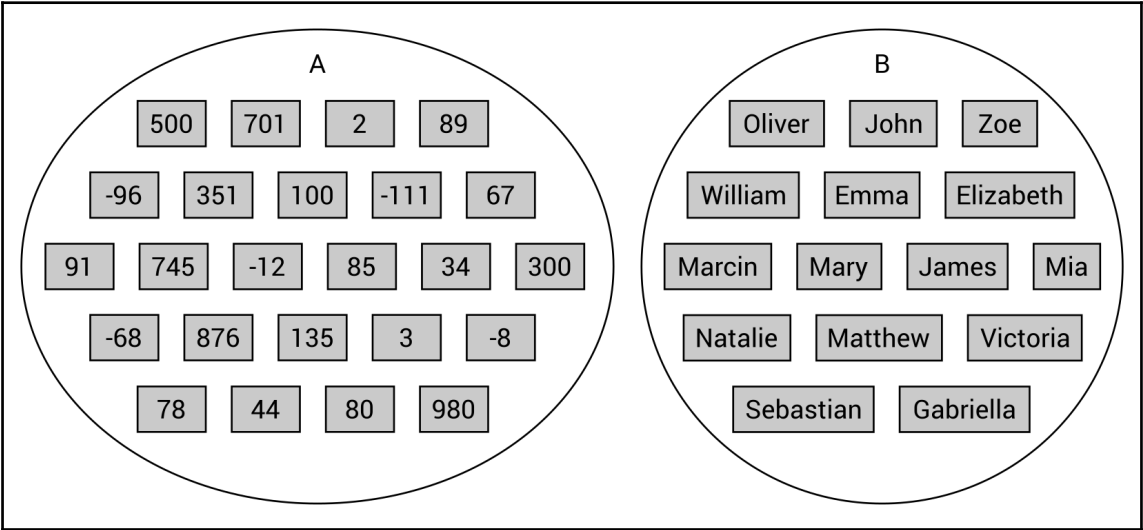
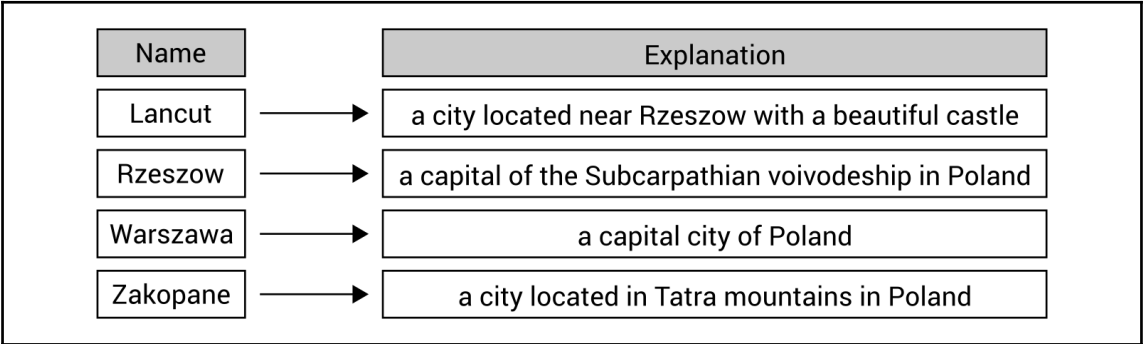
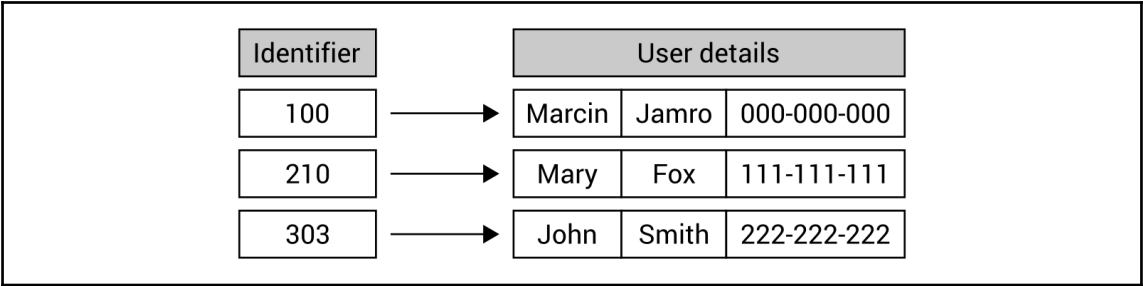
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C:\Windows\system32\cmd.exe

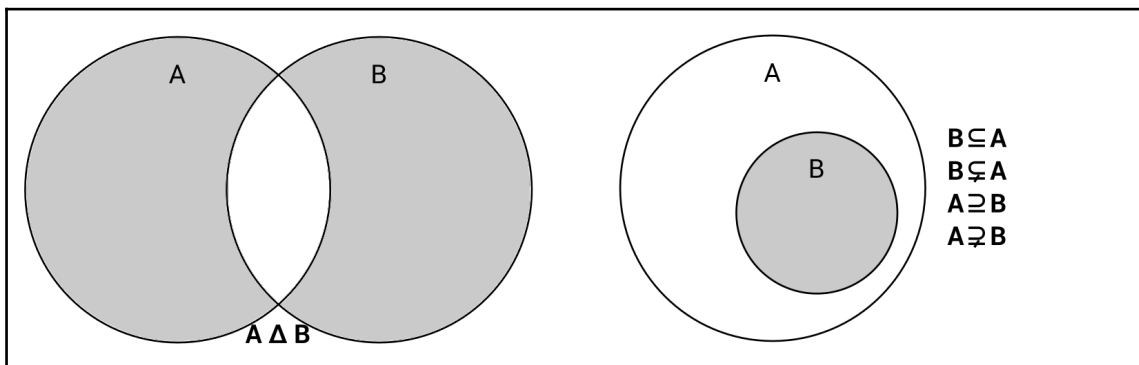
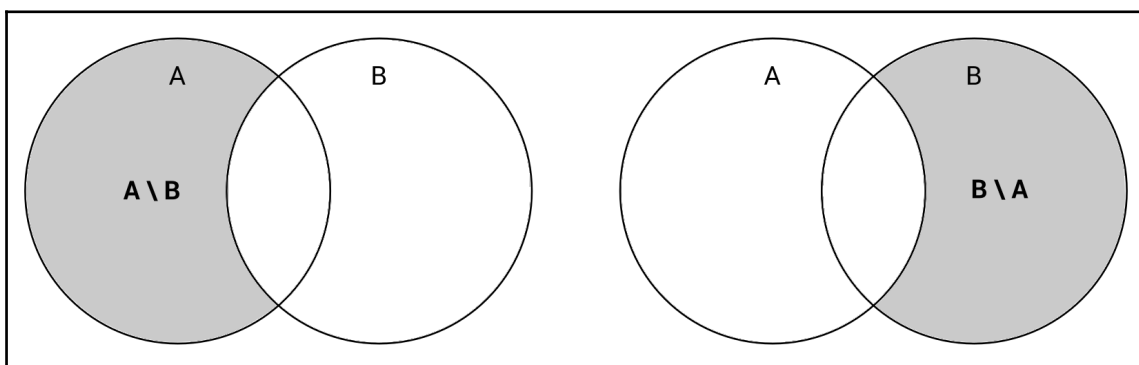
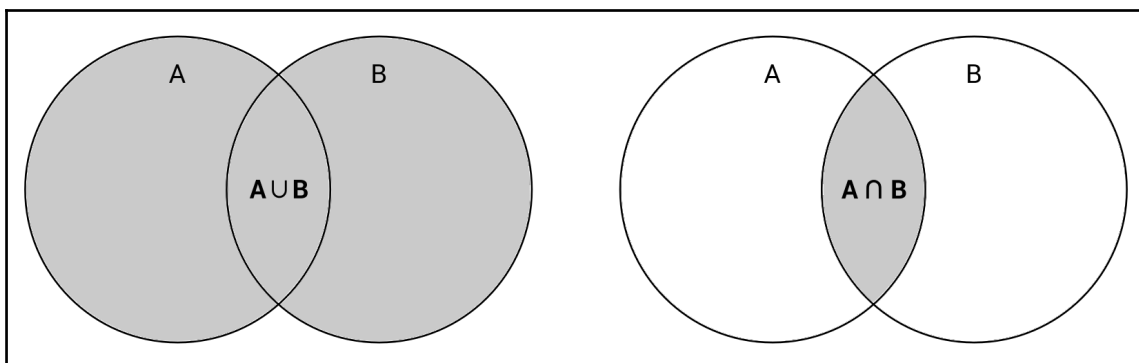
[15:17:08] Incoming call from 3000, waiting in the queue: 1
[15:17:08] Call #1 from 3000 is answered by Marcin.
[15:17:09] Incoming call from 8863, waiting in the queue: 1
[15:17:09] Call #2 from 8863 is answered by Olivia.
[15:17:11] Incoming call from 3234, waiting in the queue: 1
[15:17:11] Call #3 from 3234 is answered by James.
[15:17:12] Call #1 from 3000 is ended by Marcin.
[15:17:13] Call #2 from 8863 is ended by Olivia.
[15:17:15] Call #3 from 3234 is ended by James.
[15:17:16] Incoming call from 2266, waiting in the queue: 1
[15:17:16] Call #4 from 2266 is answered by Olivia.
[15:17:17] Incoming call from 5493, waiting in the queue: 1
[15:17:17] Call #5 from 5493 is answered by James.
[15:17:19] Incoming call from 9147, waiting in the queue: 1
[15:17:19] Call #6 from 9147 is answered by Marcin.
[15:17:21] Incoming call from 7798, waiting in the queue: 1
[15:17:24] Incoming call from 8016, waiting in the queue: 2
[15:17:25] Call #4 from 2266 is ended by Olivia.
```



Chapter 4: Dictionaries and Sets

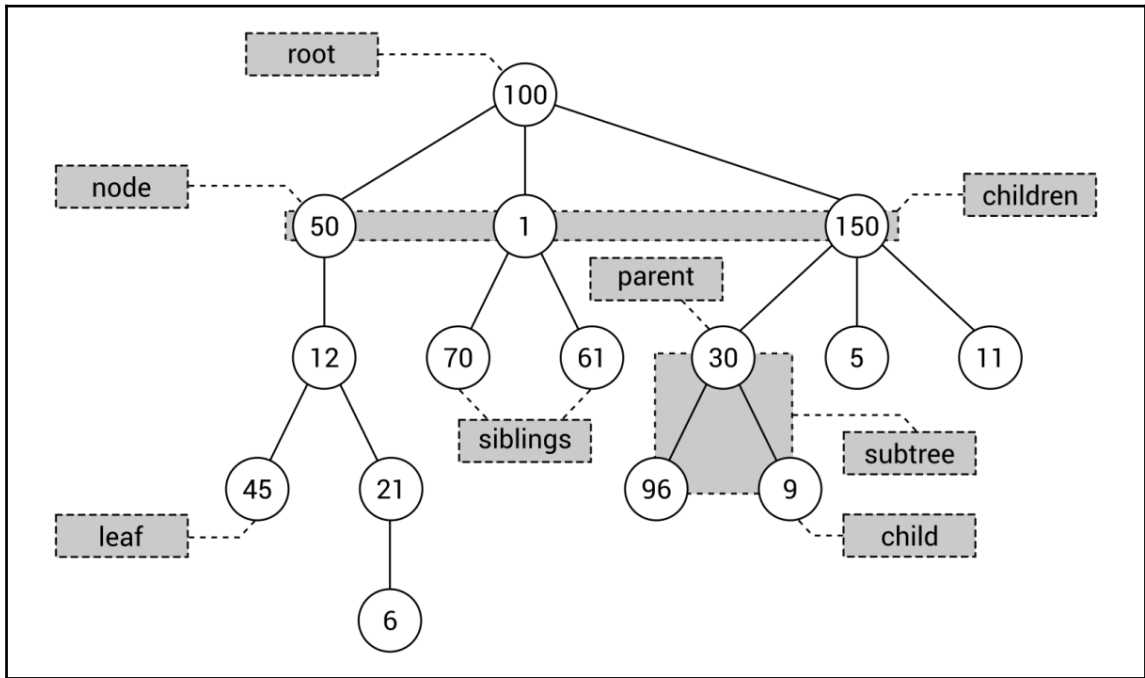


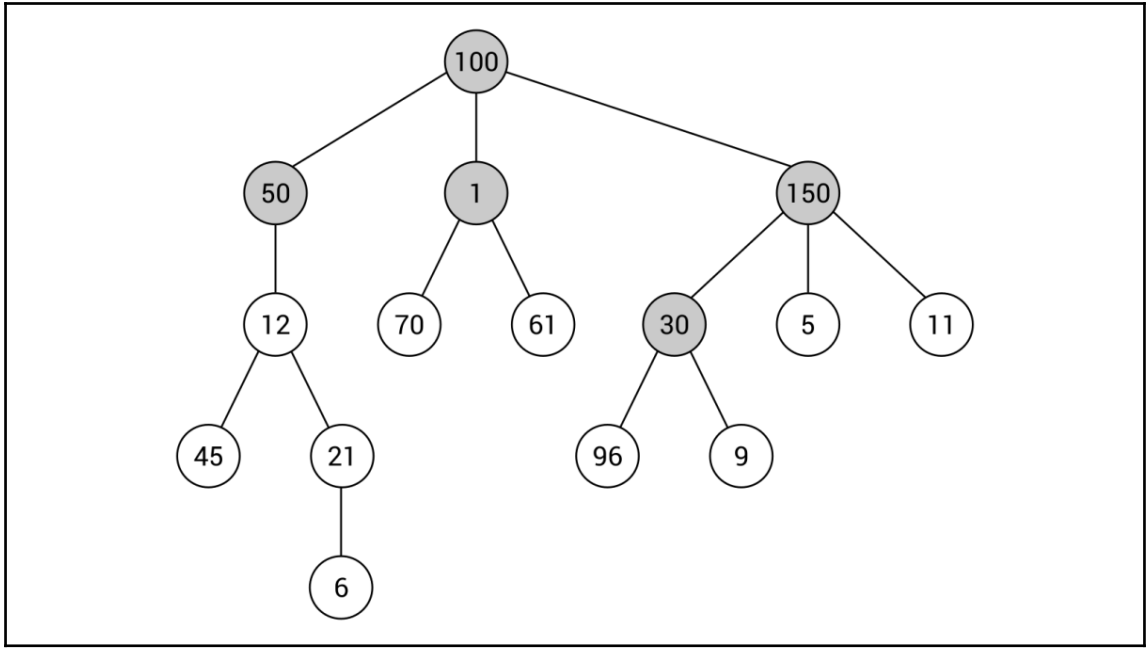


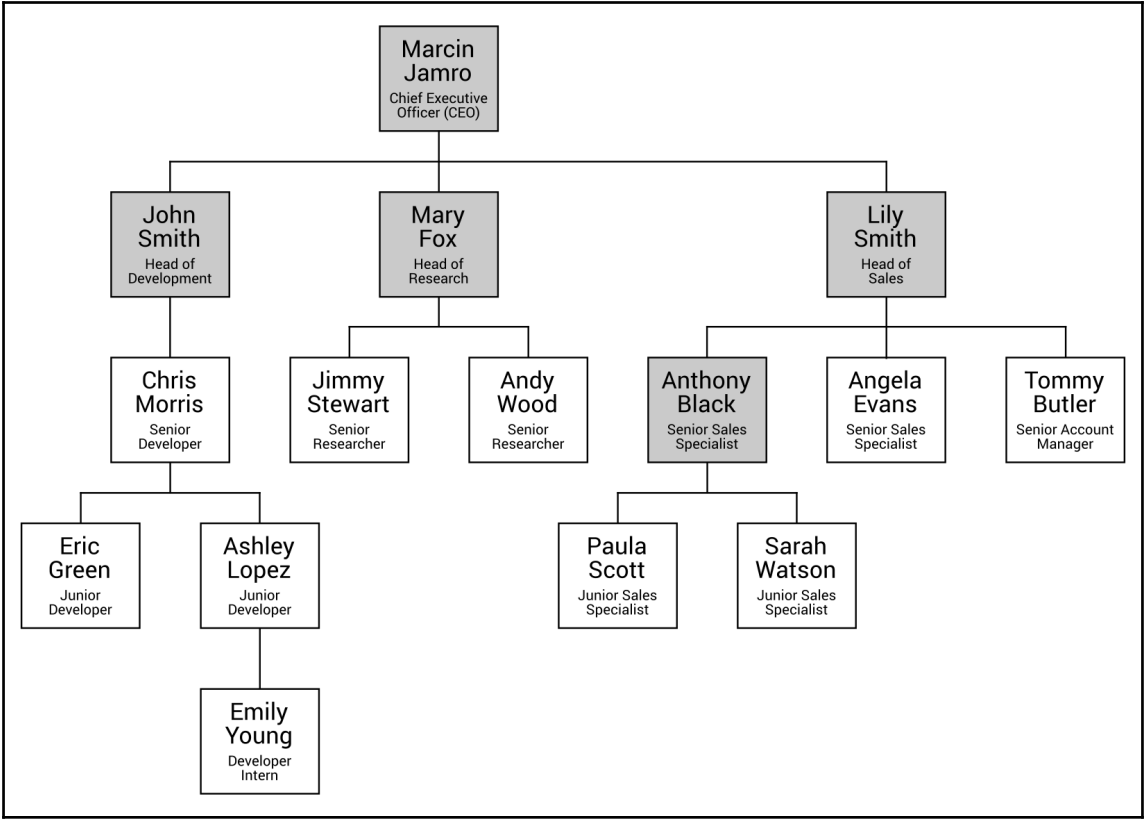


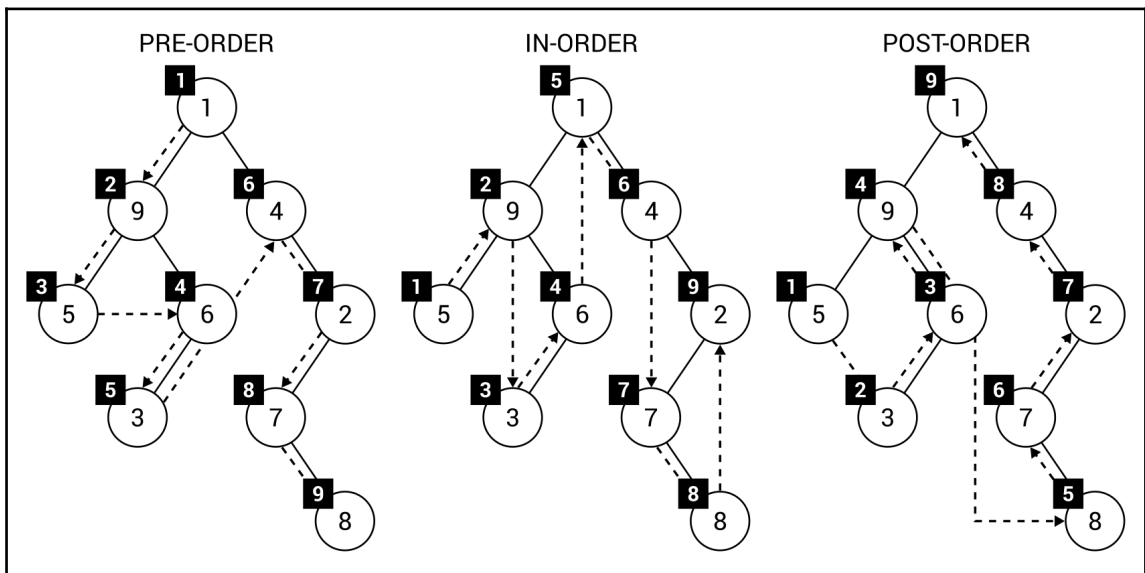
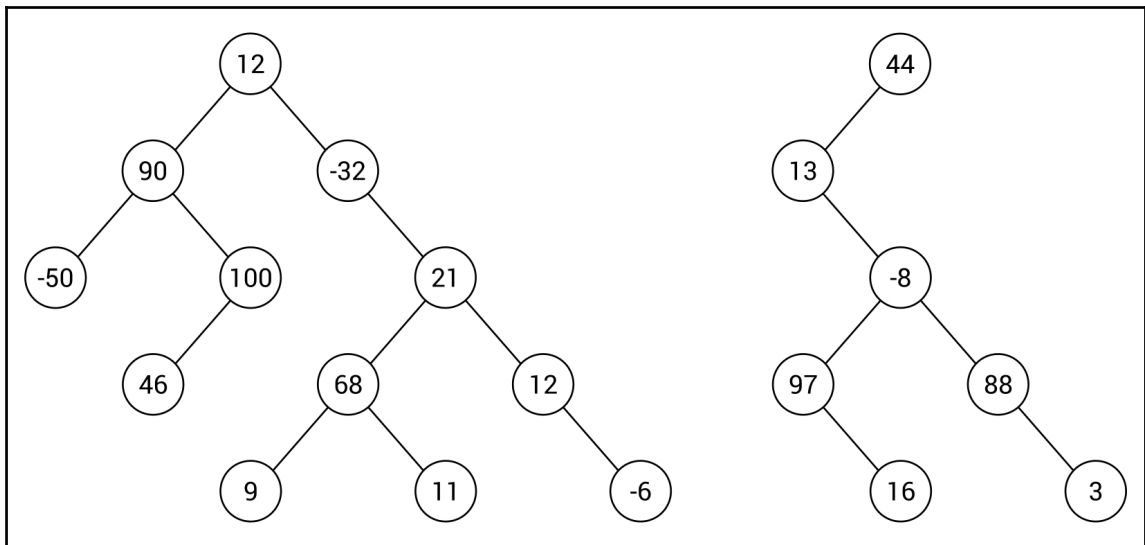
RECREATION	COMPETITION	THERMAL	FOR KIDS																																																																								
<table><tr><td>2</td><td>4</td><td>6</td></tr><tr><td>8</td><td>9</td><td>12</td></tr><tr><td>13</td><td>14</td><td>16</td></tr><tr><td>17</td><td>18</td><td>19</td></tr><tr><td>20</td><td>23</td><td>24</td></tr><tr><td>25</td><td>27</td><td>...</td></tr></table>	2	4	6	8	9	12	13	14	16	17	18	19	20	23	24	25	27	...	<table><tr><td>2</td><td>3</td><td>6</td></tr><tr><td>7</td><td>8</td><td>9</td></tr><tr><td>11</td><td>15</td><td>19</td></tr><tr><td>22</td><td>25</td><td>27</td></tr><tr><td>28</td><td>30</td><td>32</td></tr><tr><td>33</td><td>34</td><td>...</td></tr></table>	2	3	6	7	8	9	11	15	19	22	25	27	28	30	32	33	34	...	<table><tr><td>1</td><td>4</td><td>6</td></tr><tr><td>7</td><td>9</td><td>10</td></tr><tr><td>13</td><td>16</td><td>17</td></tr><tr><td>18</td><td>19</td><td>26</td></tr><tr><td>28</td><td>29</td><td>31</td></tr><tr><td>32</td><td>33</td><td>...</td></tr></table>	1	4	6	7	9	10	13	16	17	18	19	26	28	29	31	32	33	...	<table><tr><td>3</td><td>5</td><td>6</td></tr><tr><td>8</td><td>11</td><td>13</td></tr><tr><td>16</td><td>17</td><td>18</td></tr><tr><td>20</td><td>22</td><td>23</td></tr><tr><td>24</td><td>26</td><td>27</td></tr><tr><td>29</td><td>30</td><td>...</td></tr></table>	3	5	6	8	11	13	16	17	18	20	22	23	24	26	27	29	30	...
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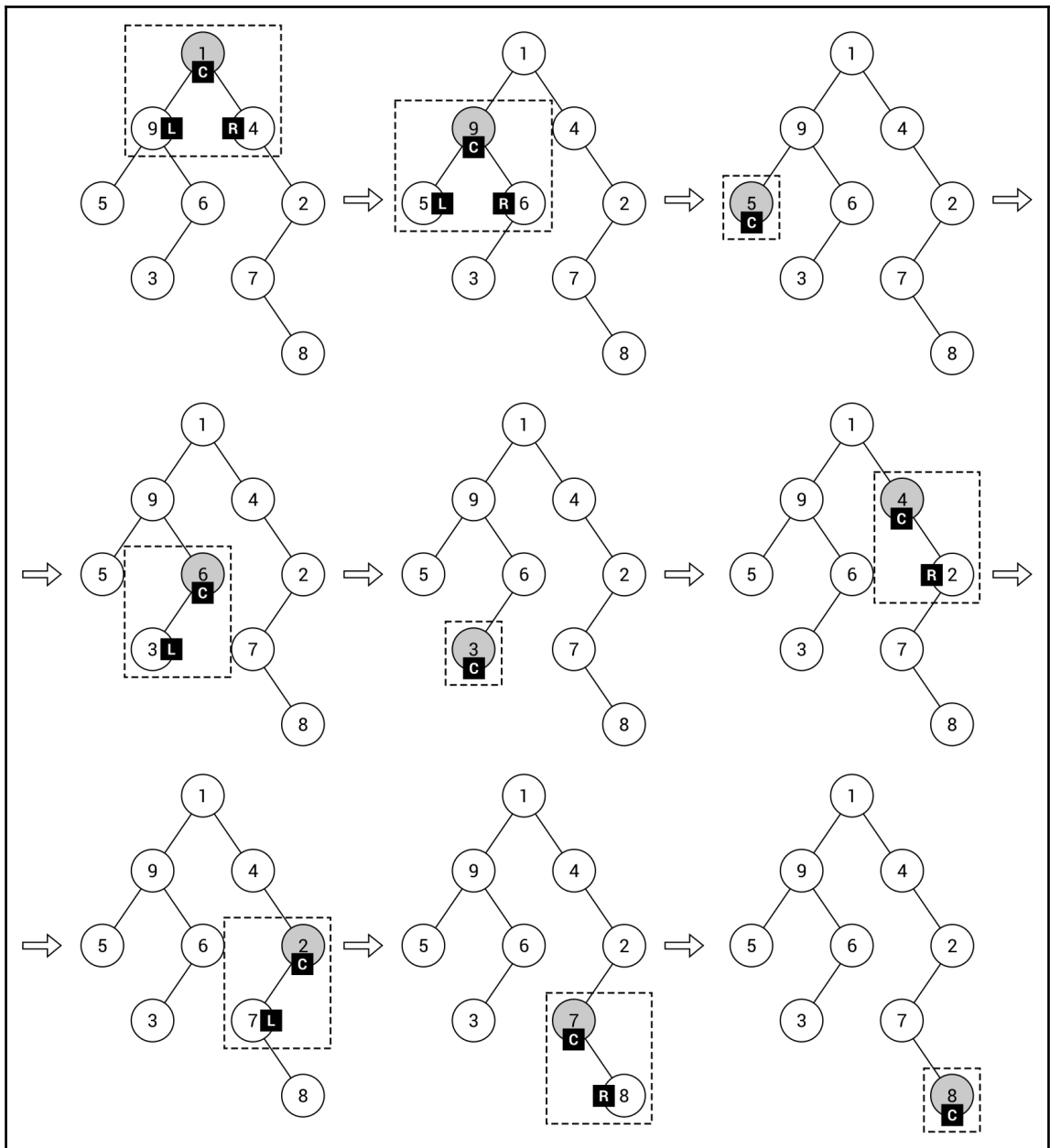
Chapter 5: Variants of Trees

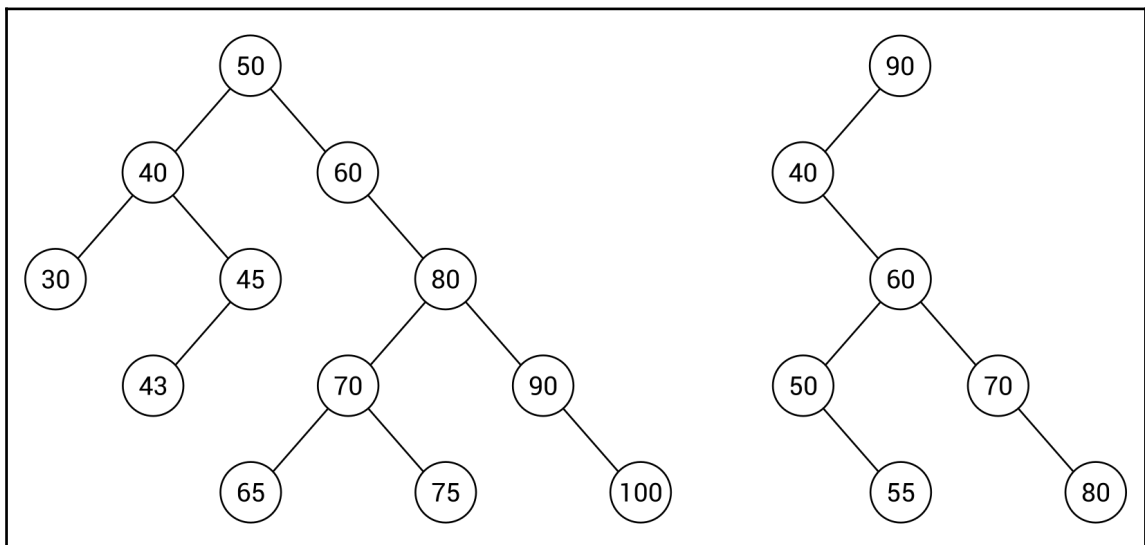
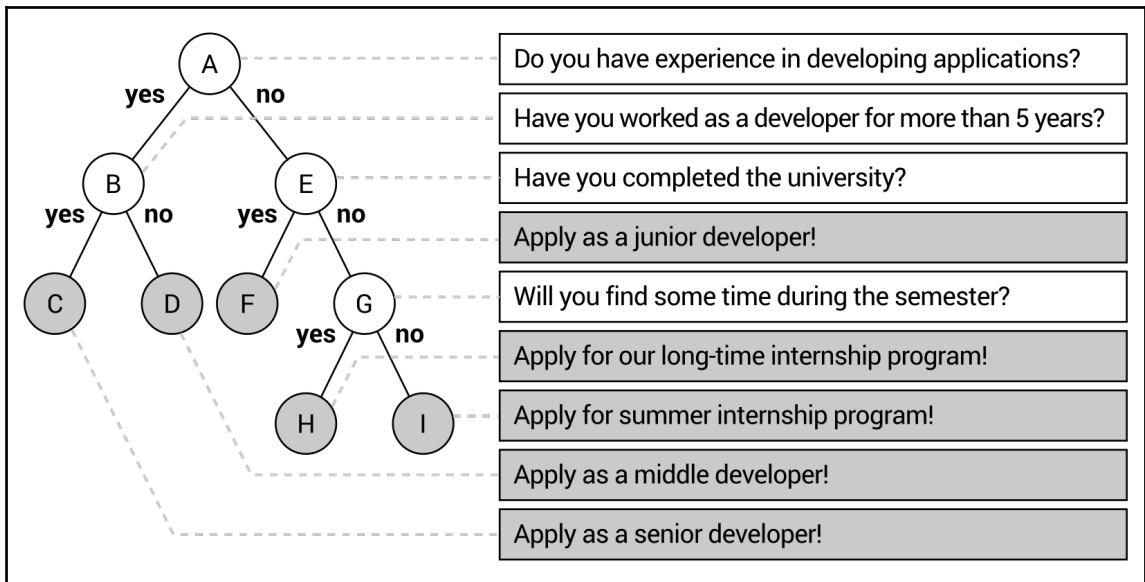




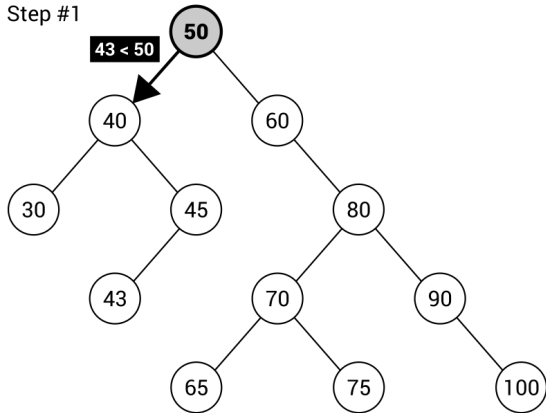




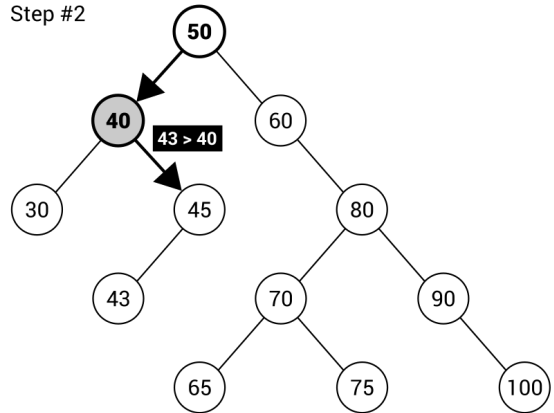




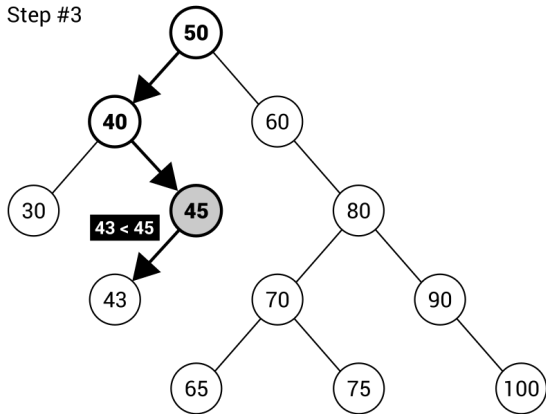
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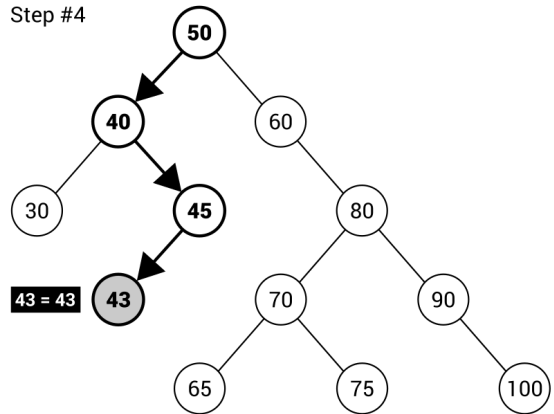
Step #2

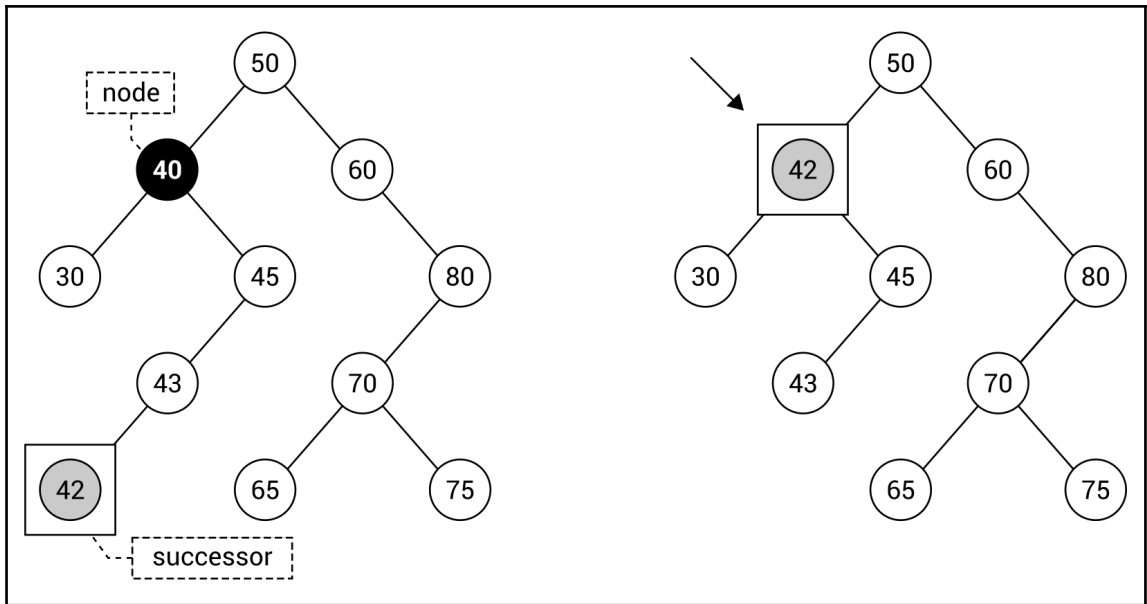
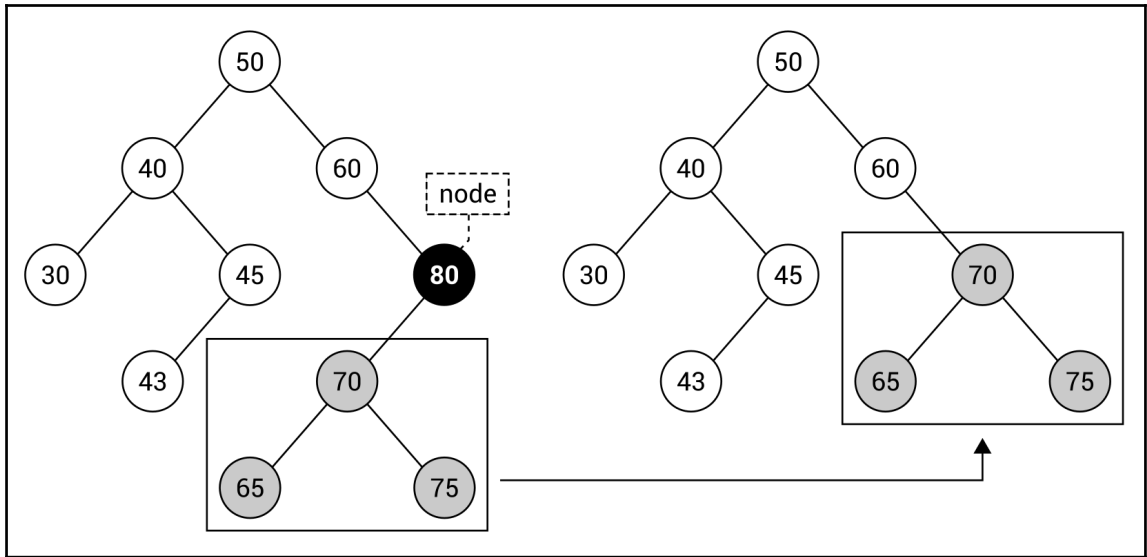


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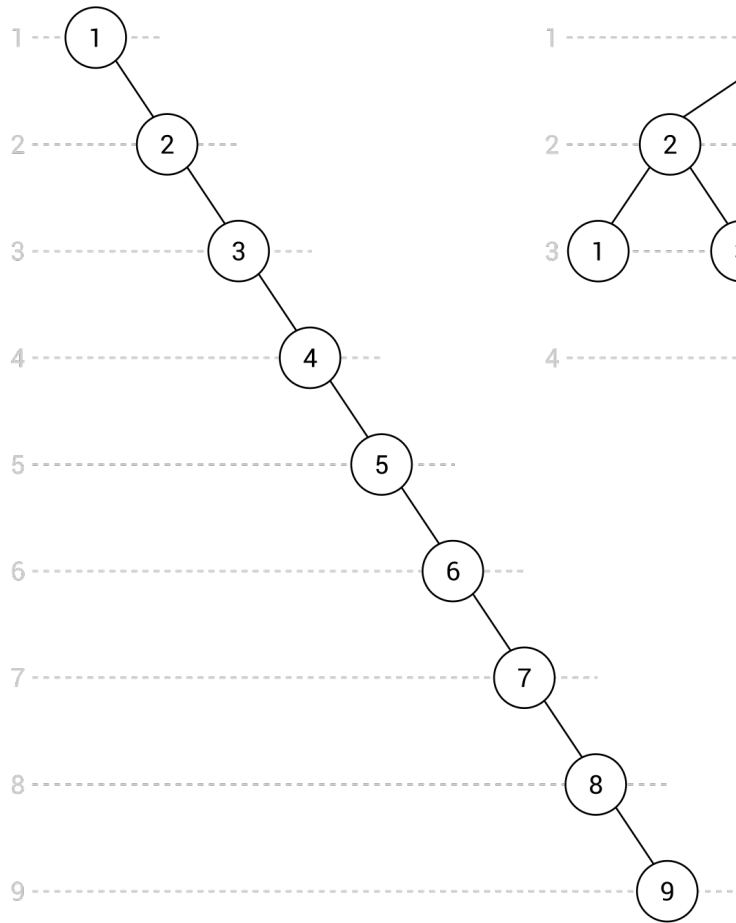


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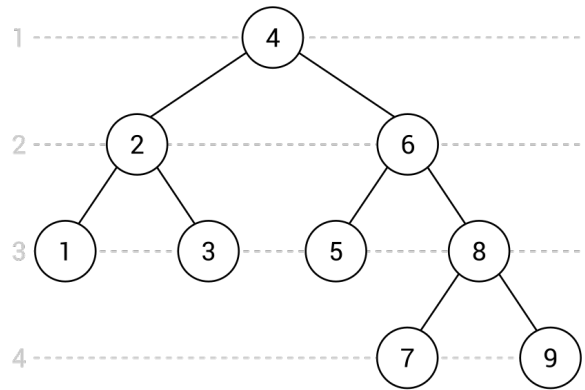


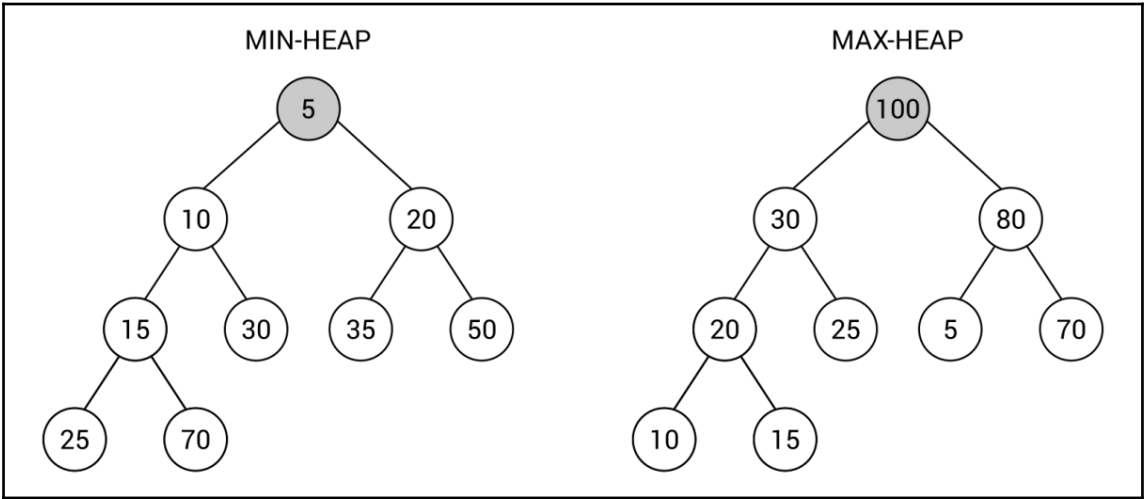
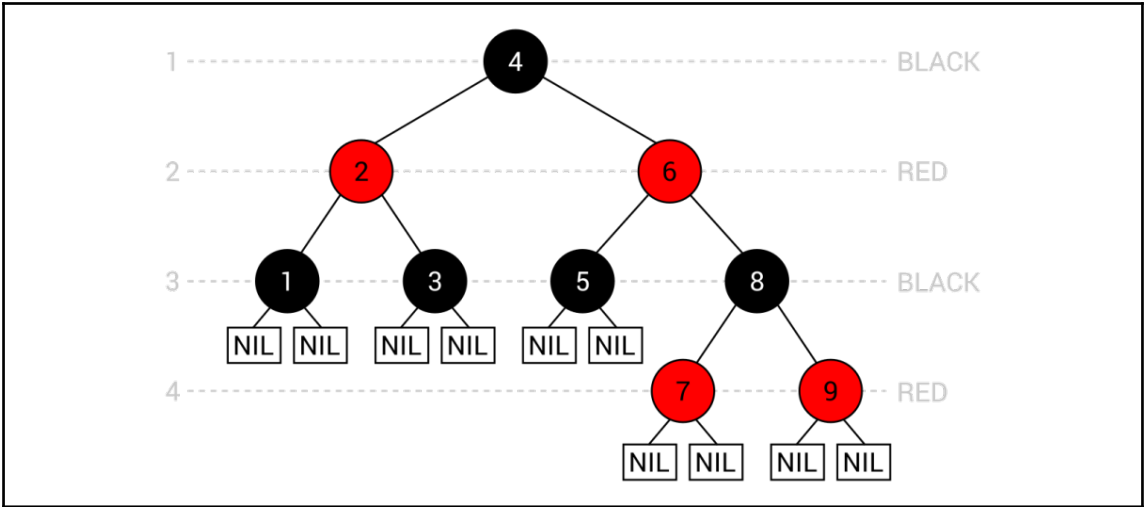


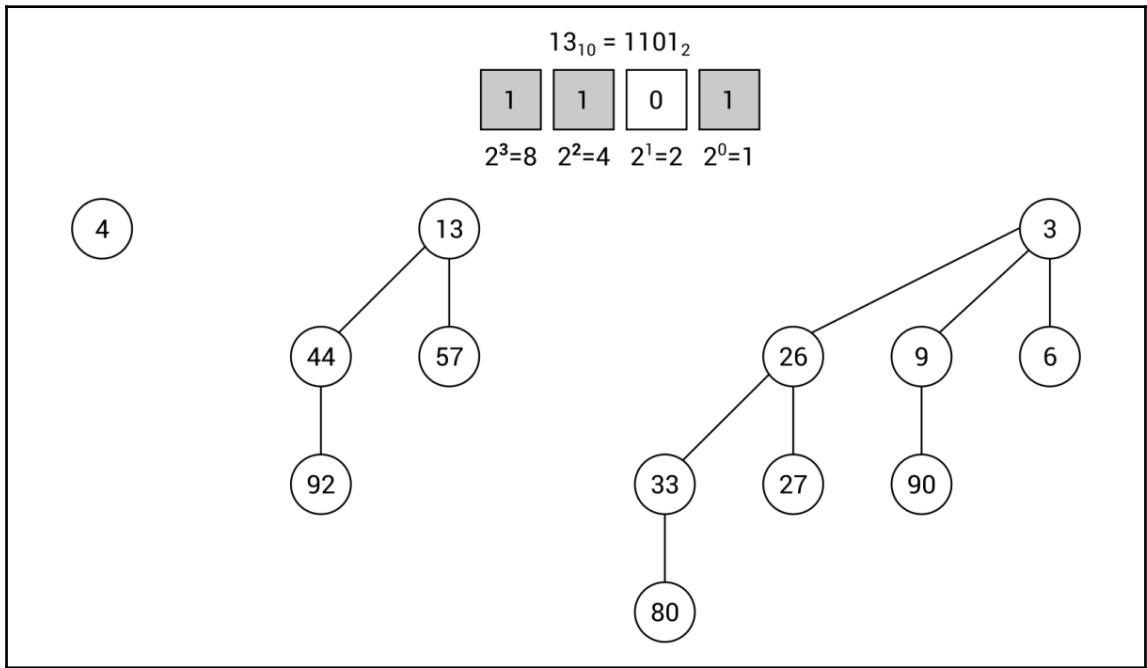
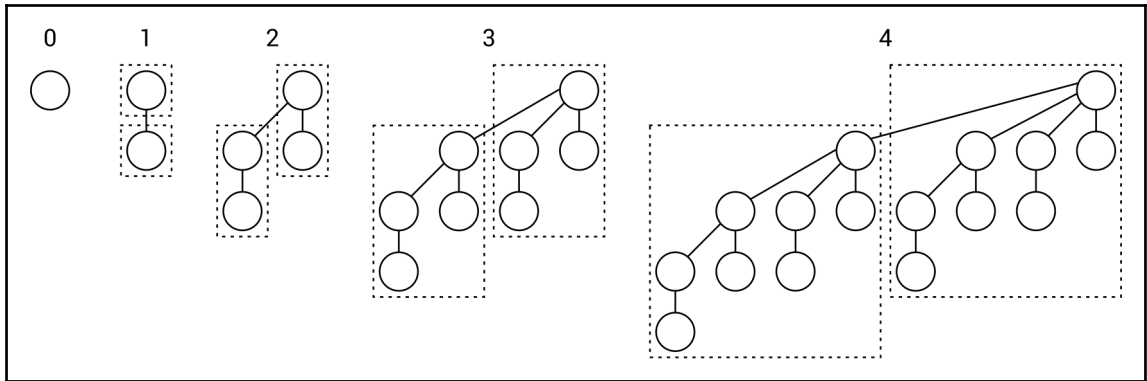
UNBALANCED TREE

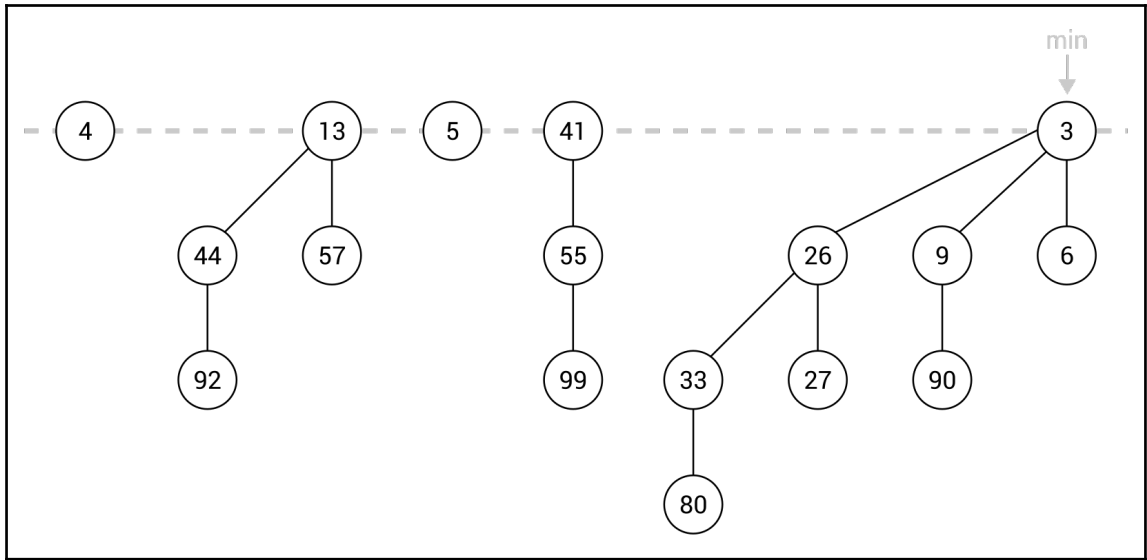


BALANCED TREE

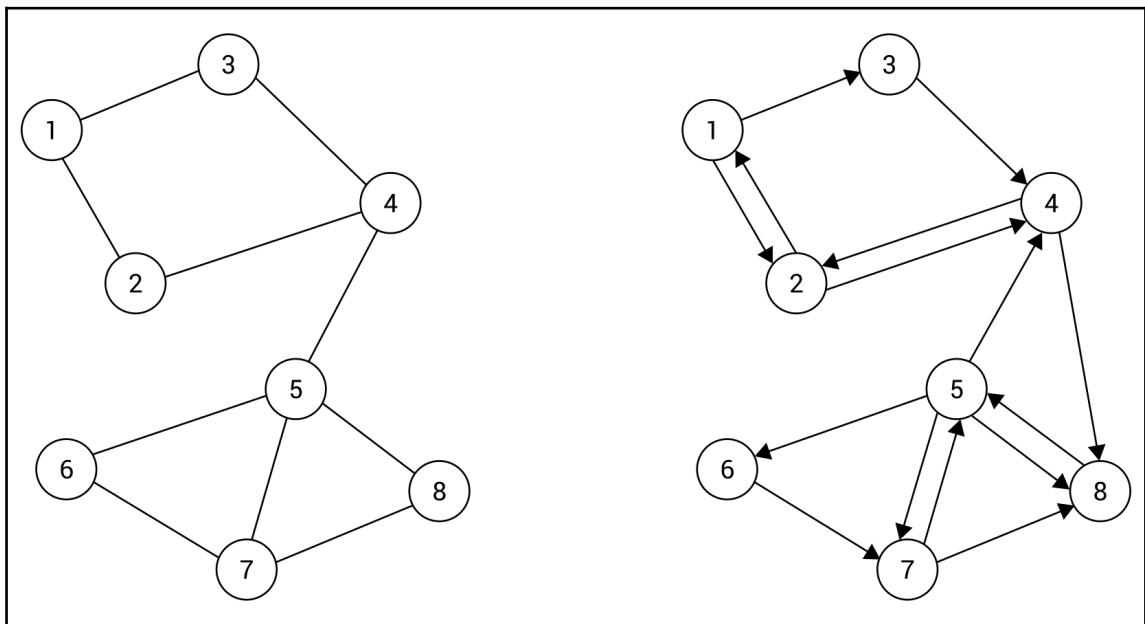
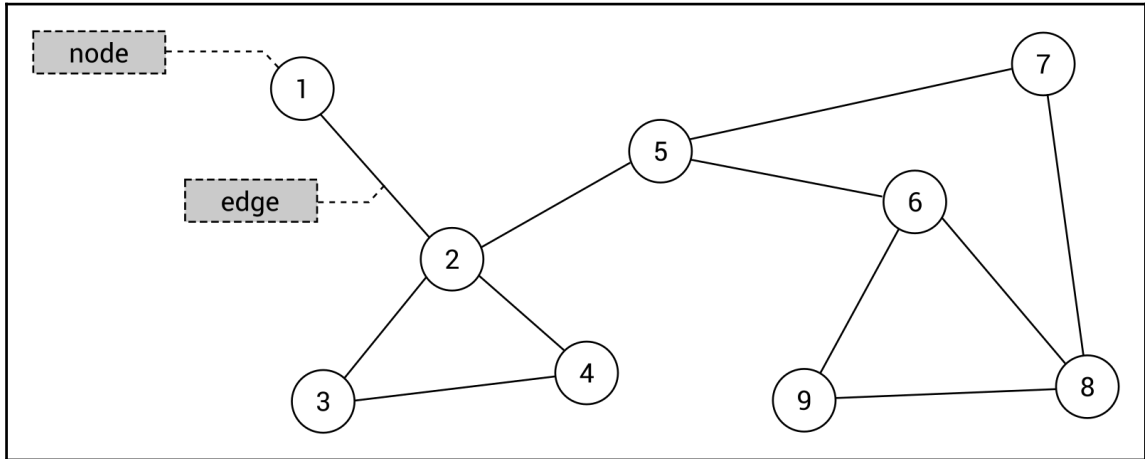


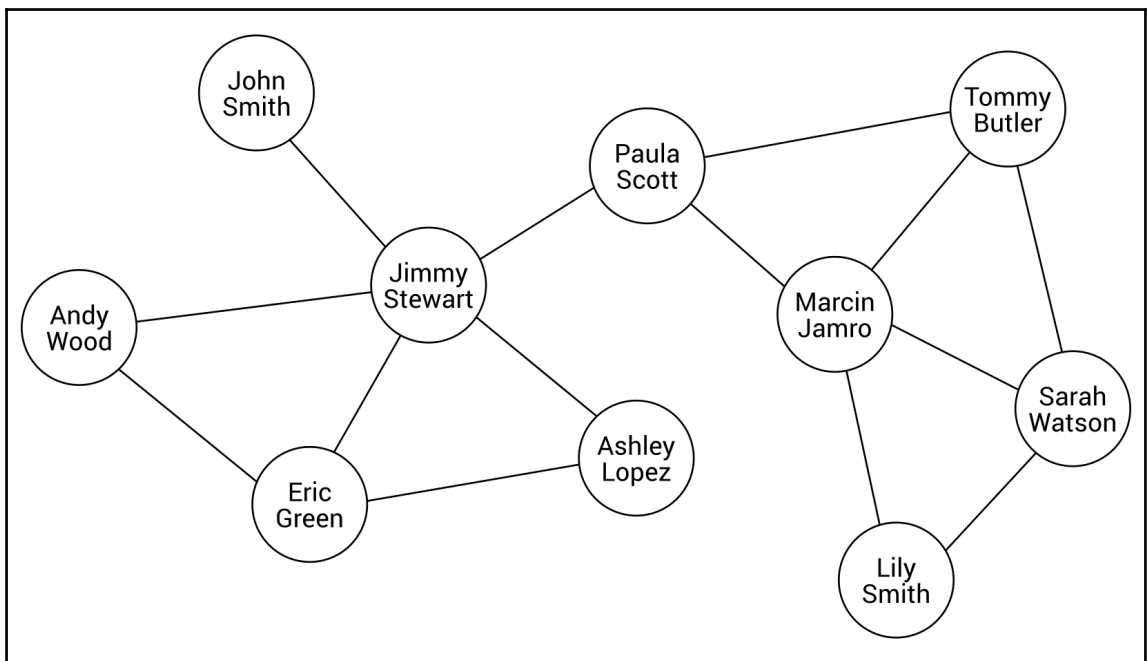
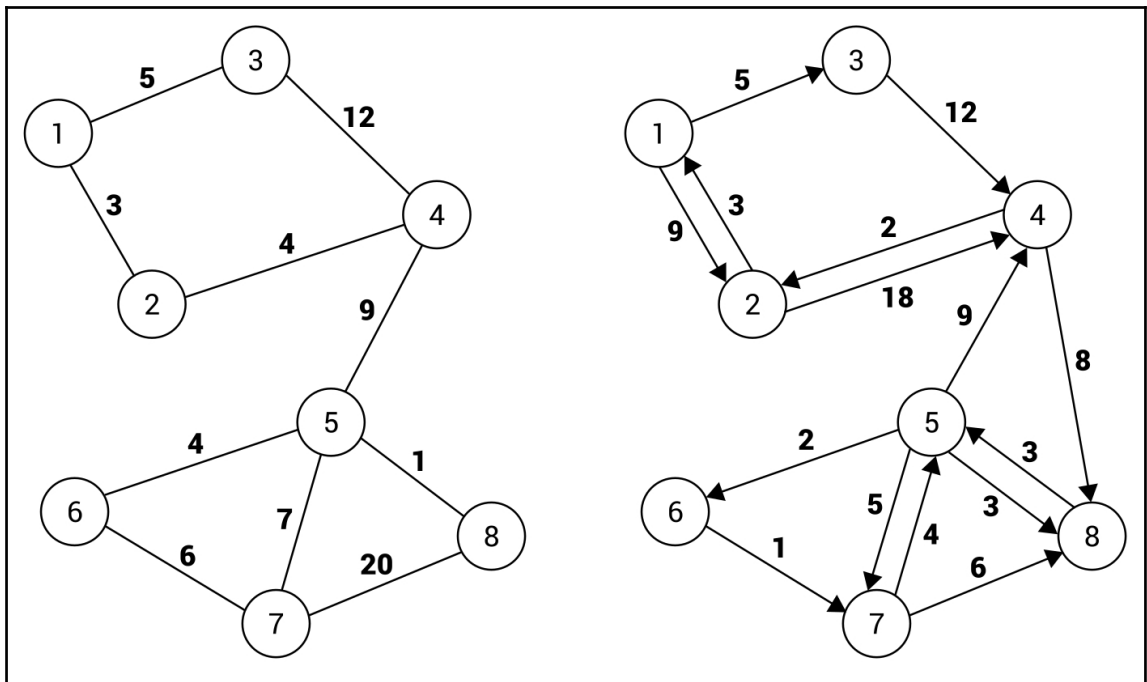


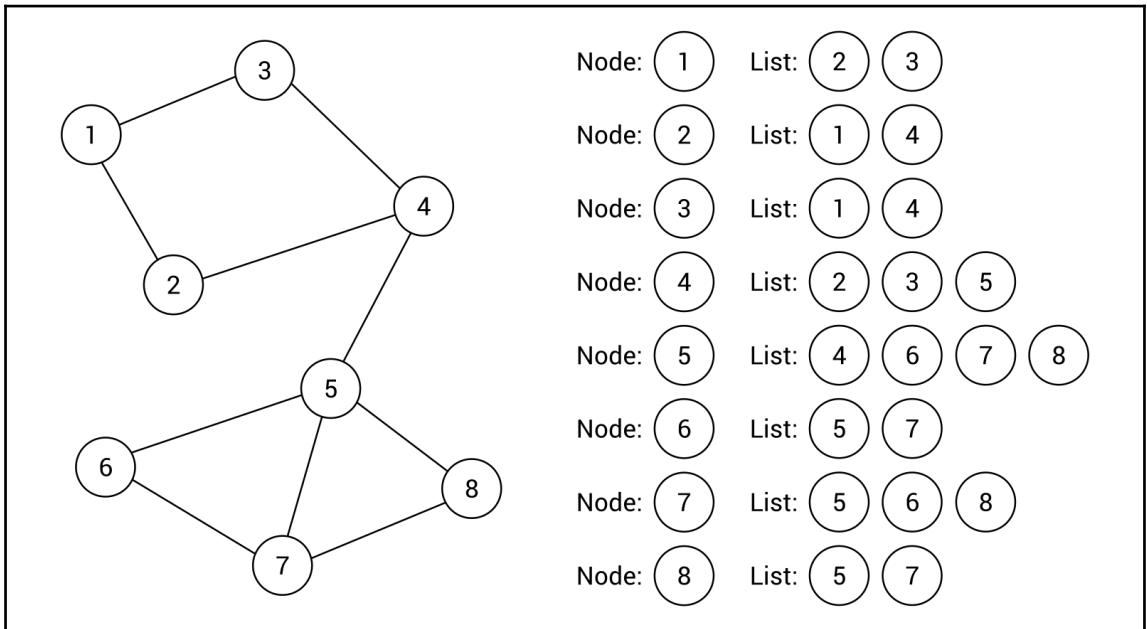
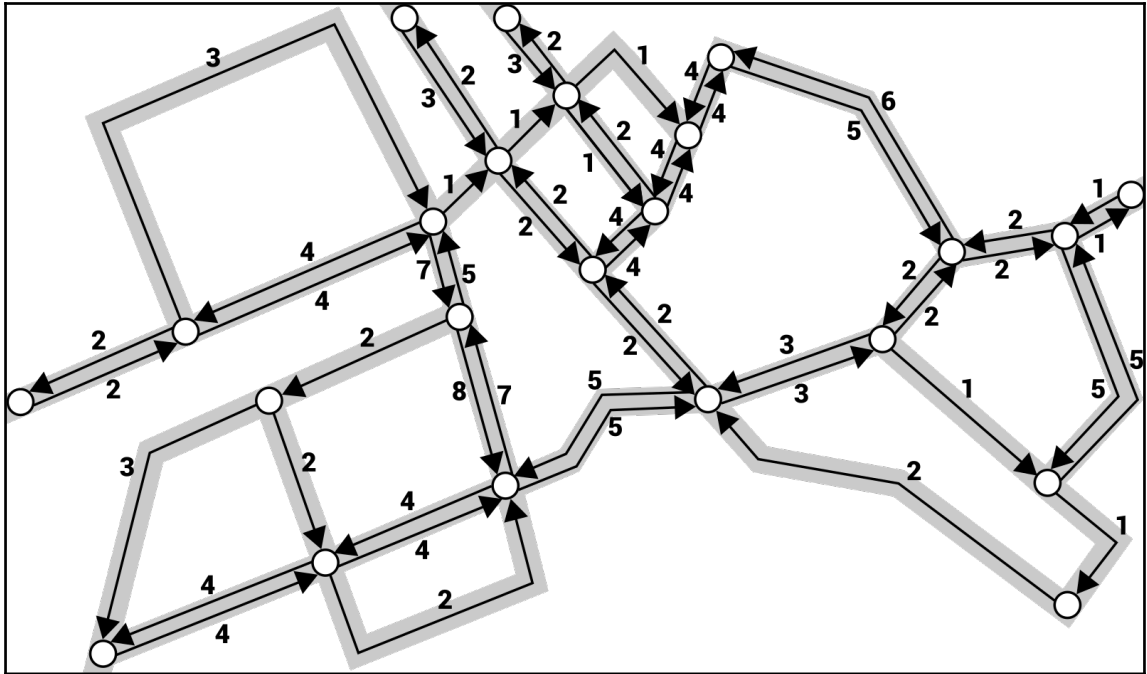


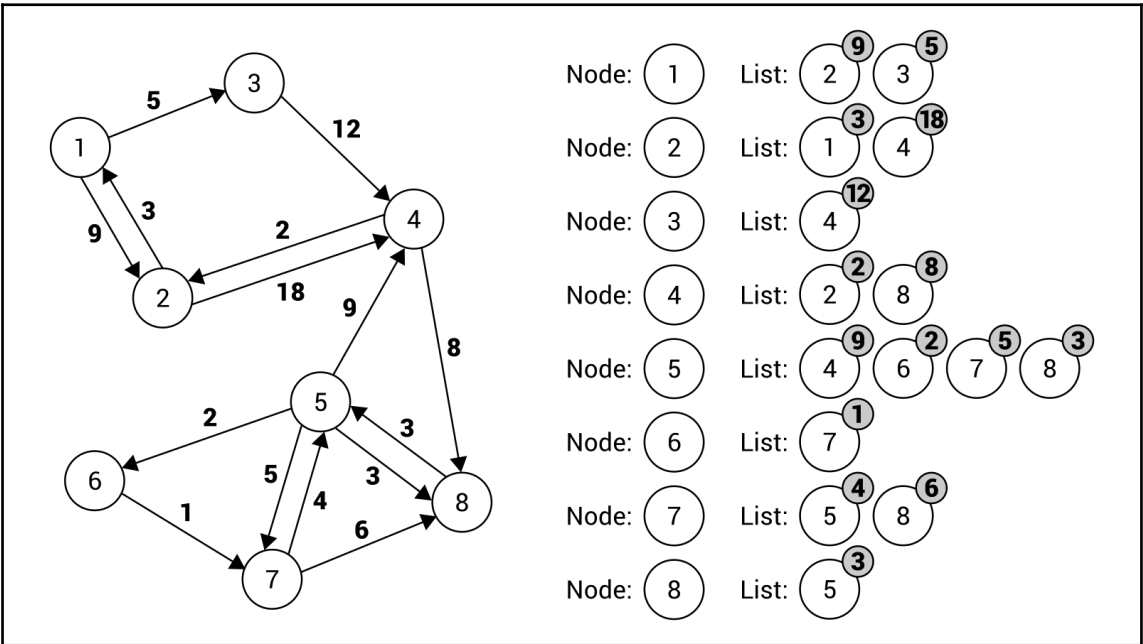
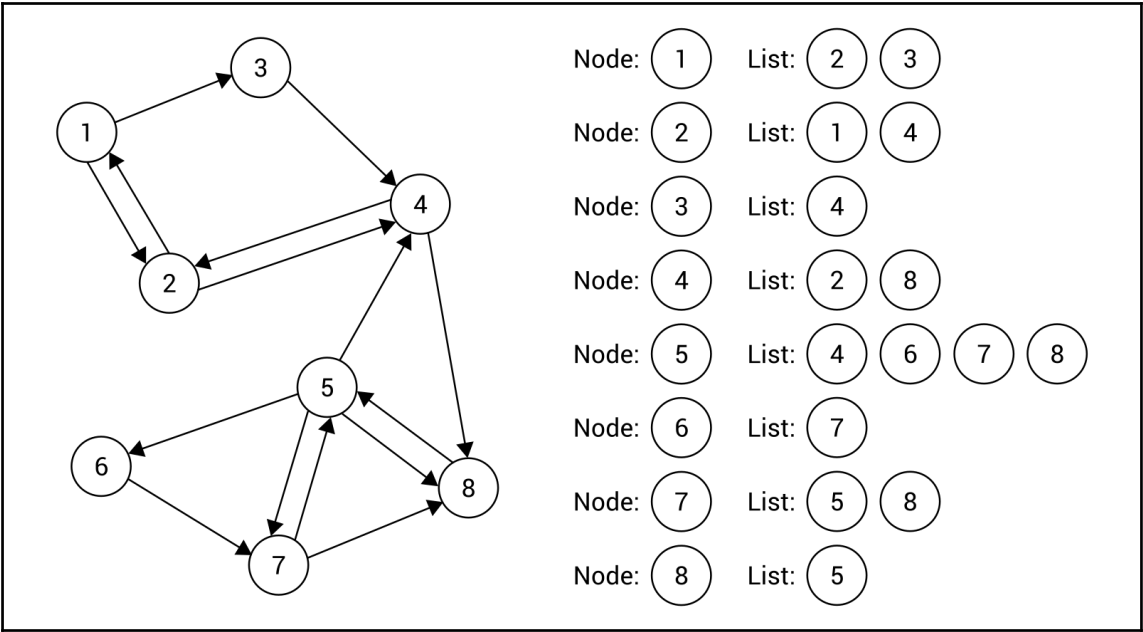


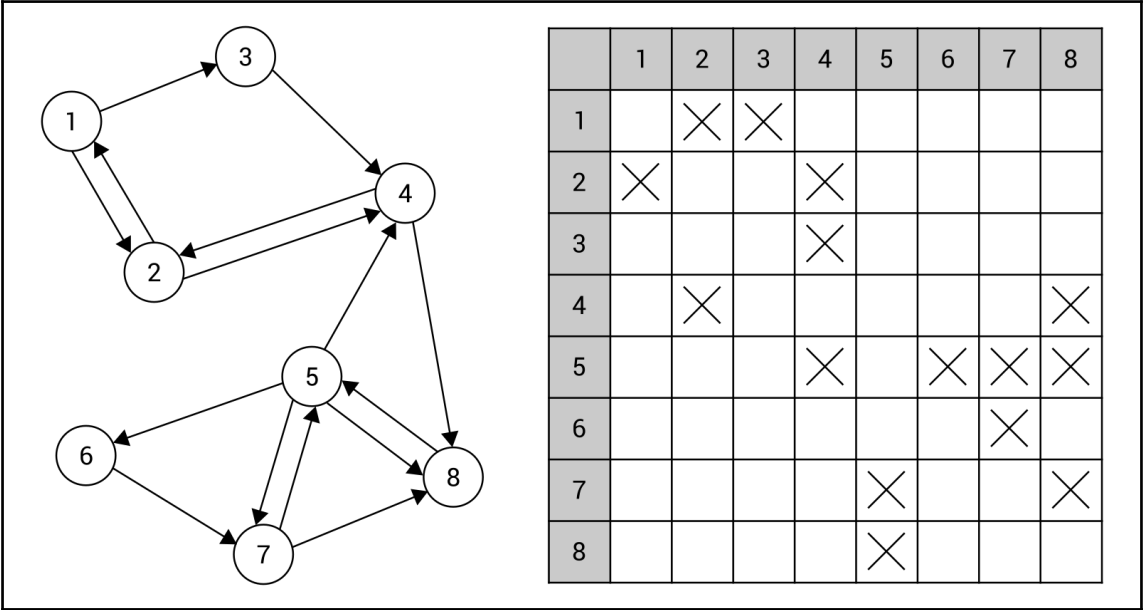
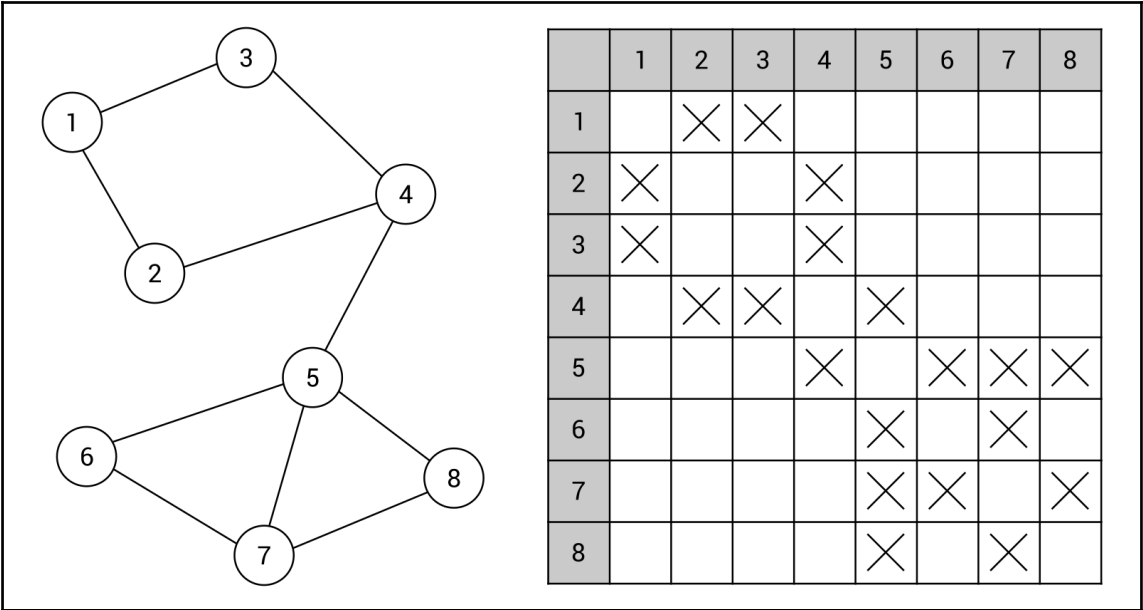
Chapter 6: Exploring Graphs

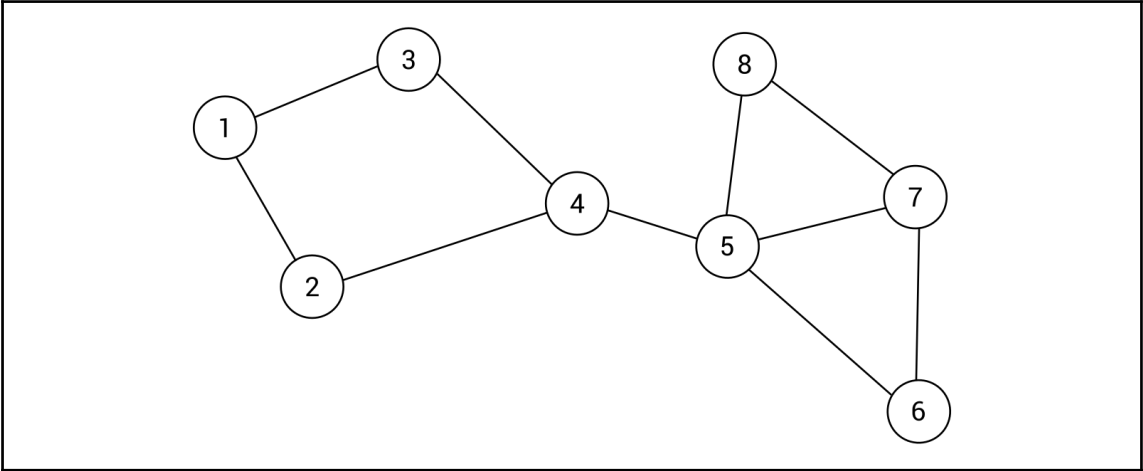
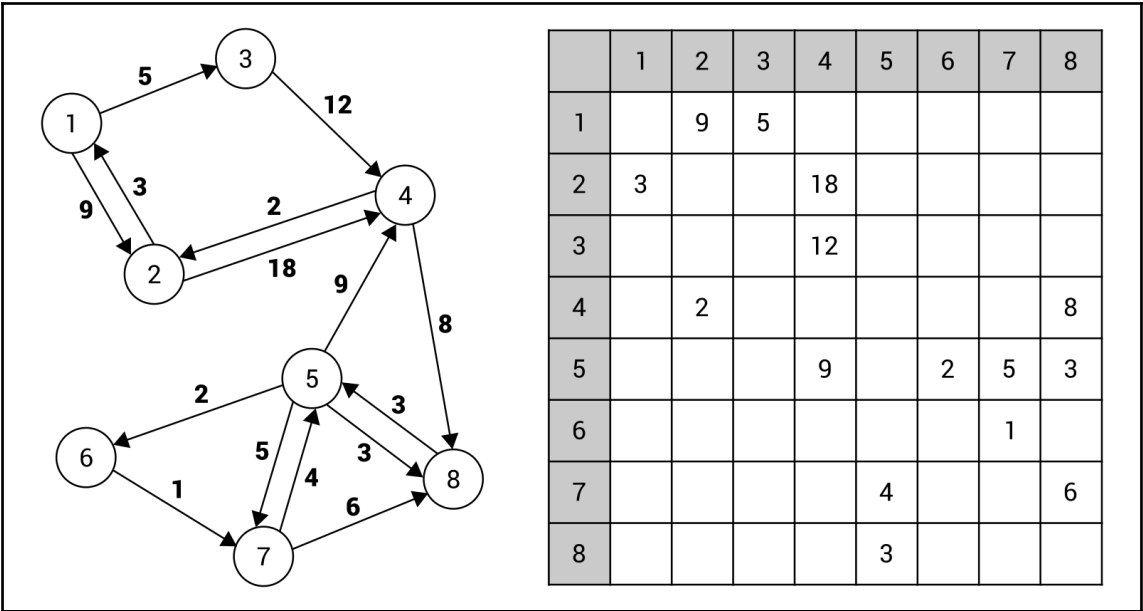


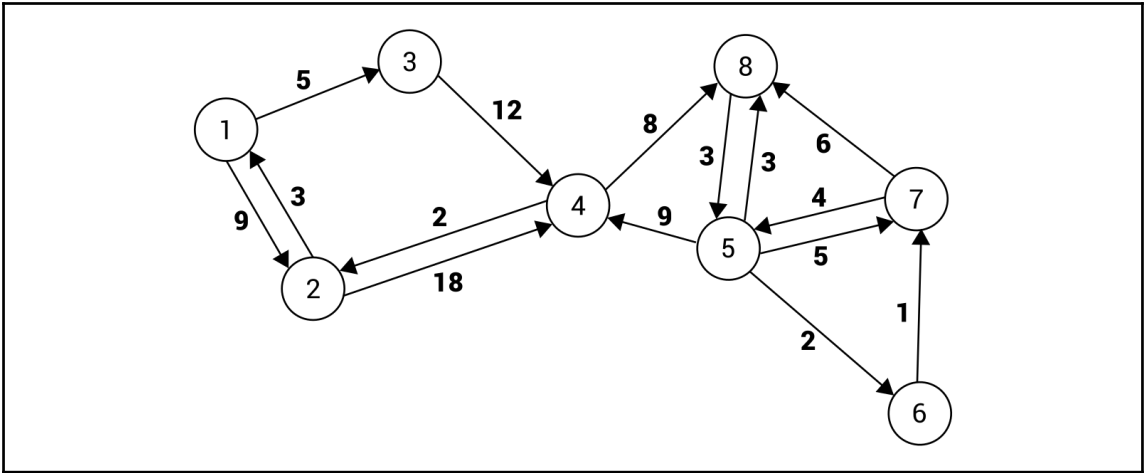




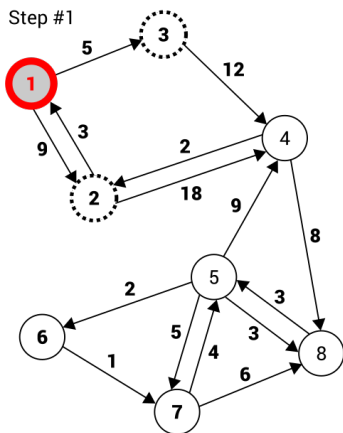




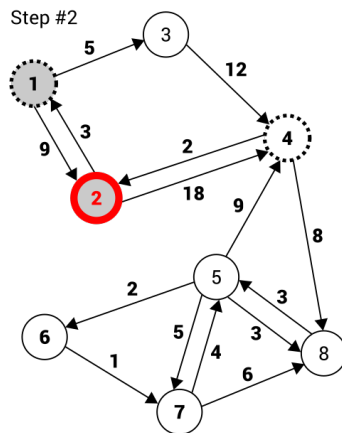




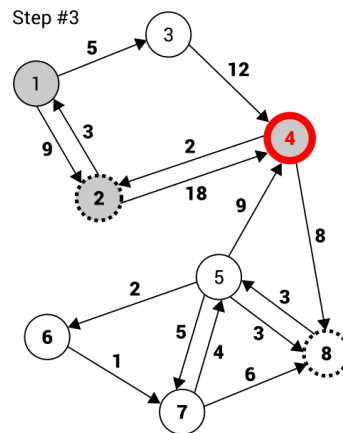
Step #1



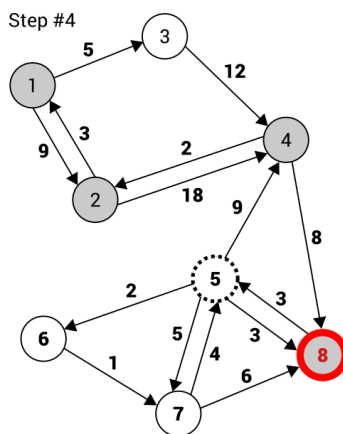
Step #2



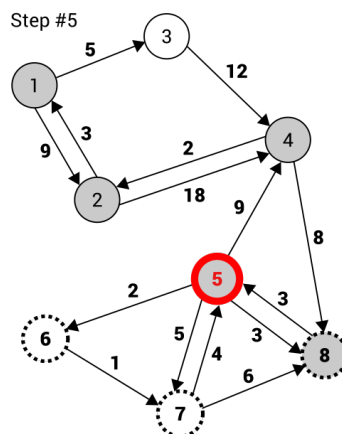
Step #3



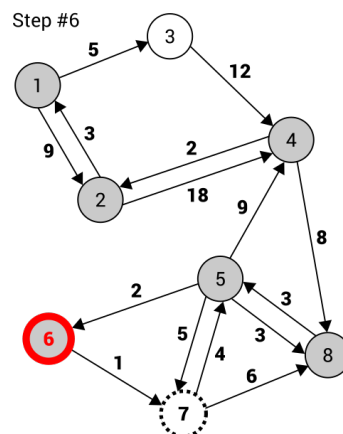
Step #4



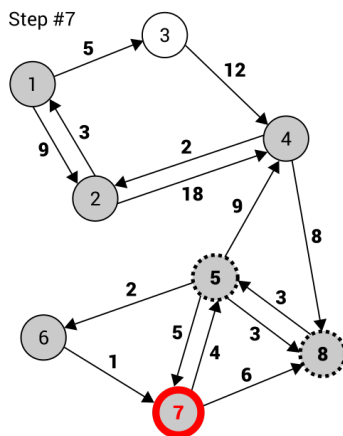
Step #5



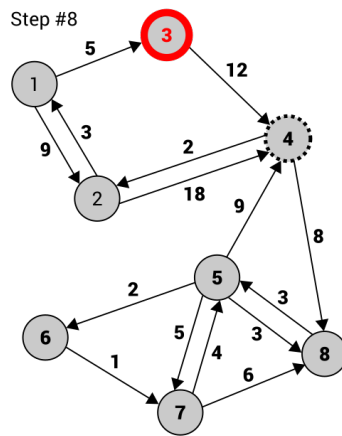
Step #6



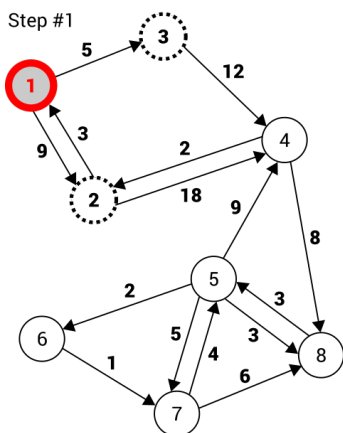
Step #7



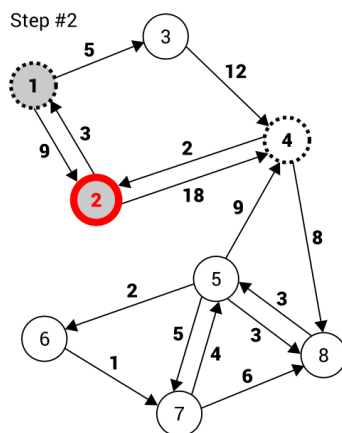
Step #8



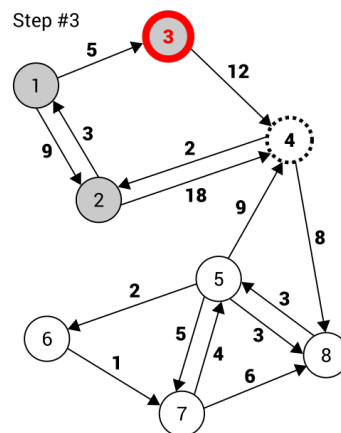
Step #1



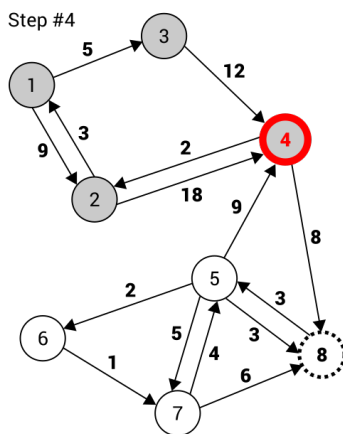
Step #2



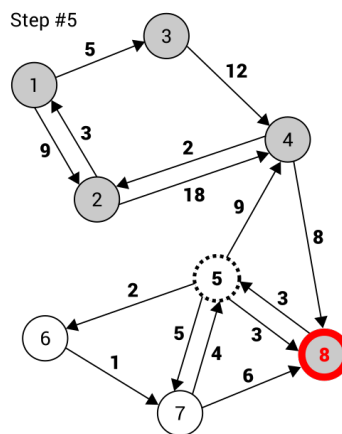
Step #3



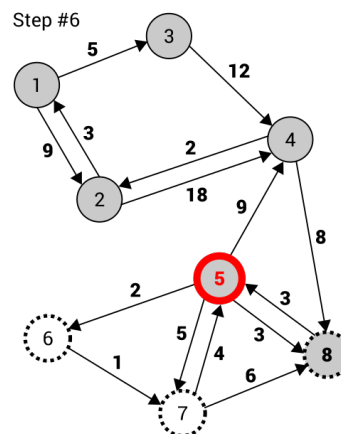
Step #4



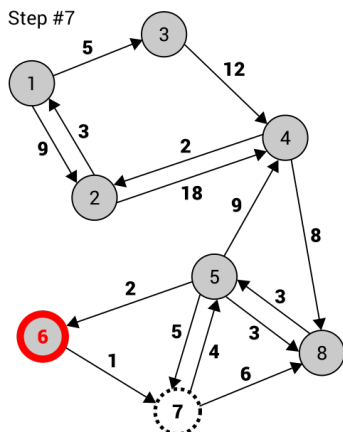
Step #5



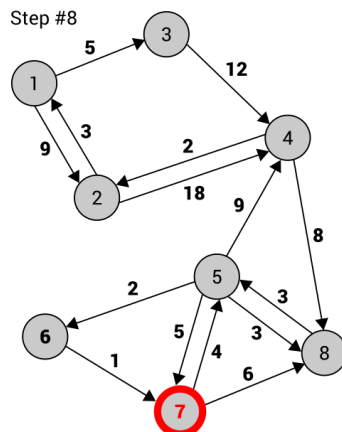
Step #6

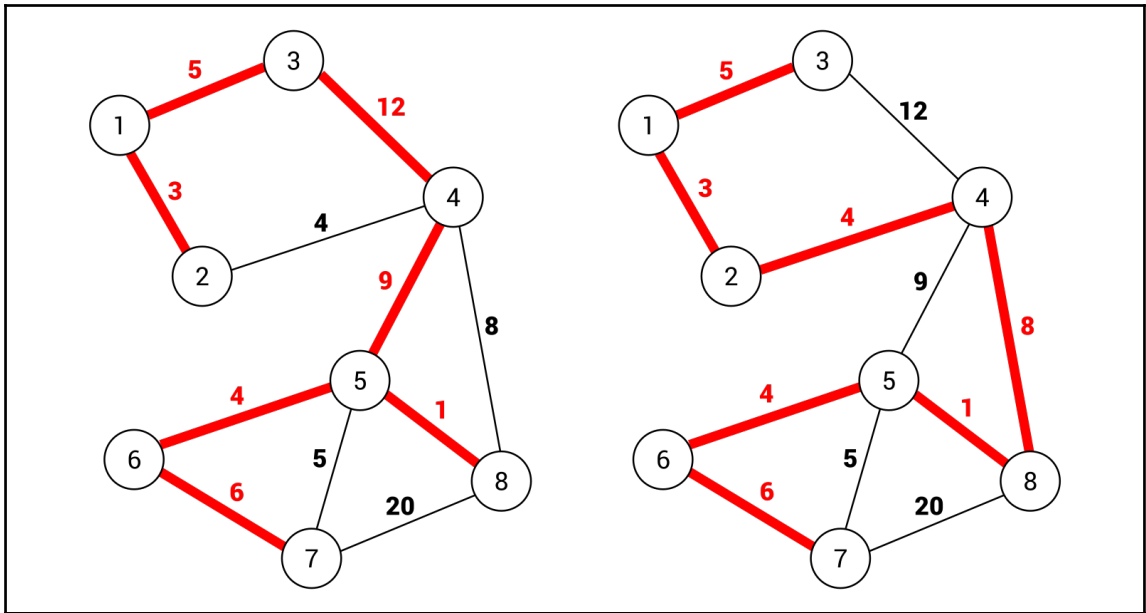


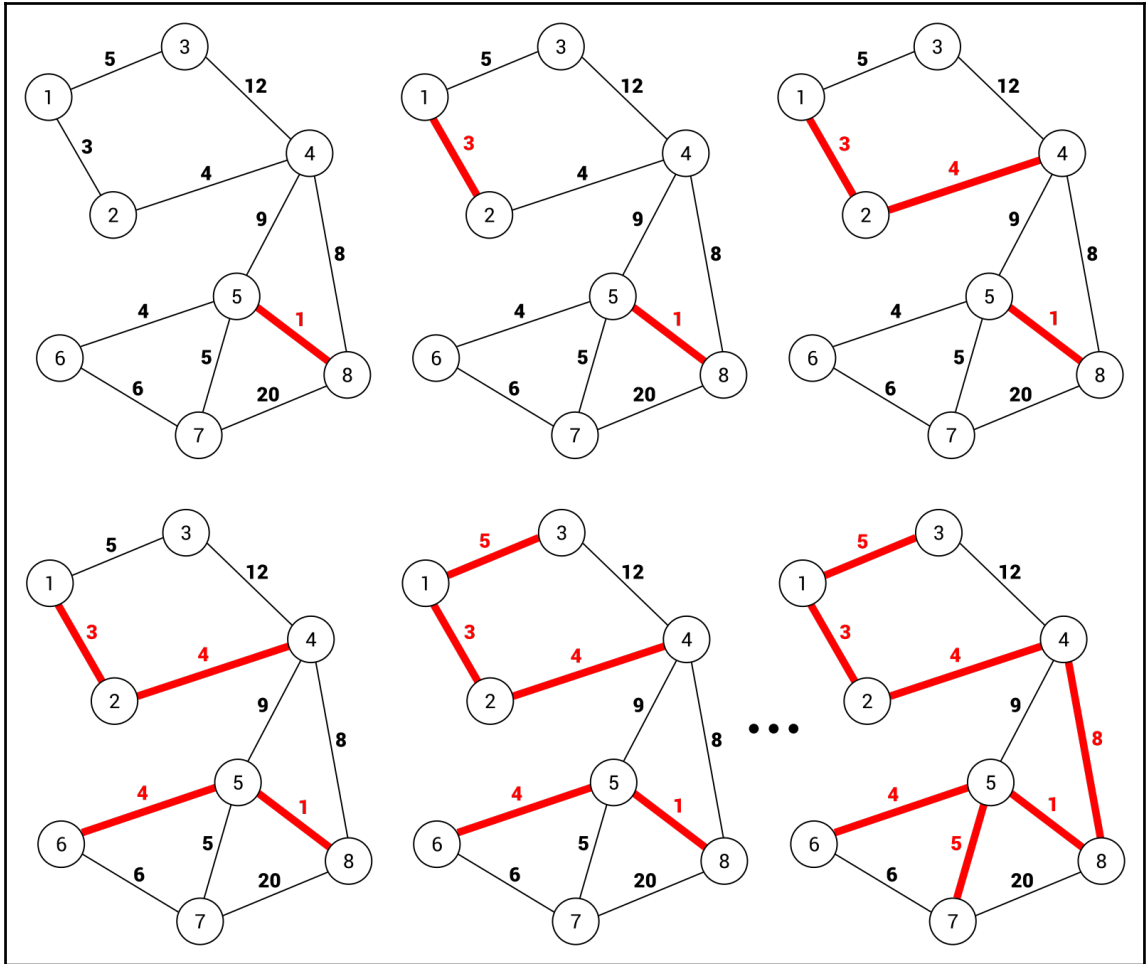
Step #7



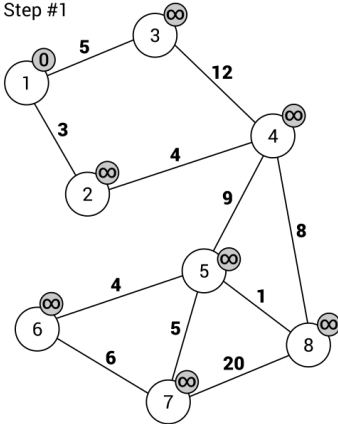
Step #8



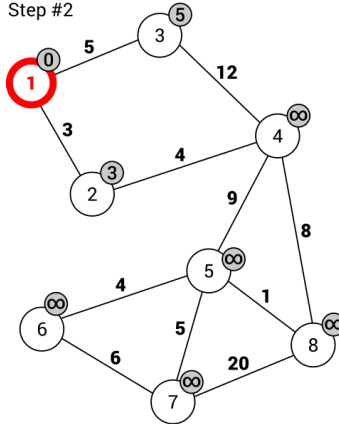




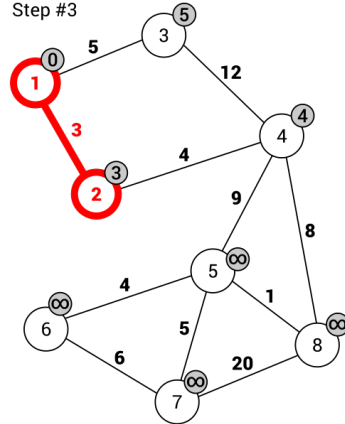
Step #1



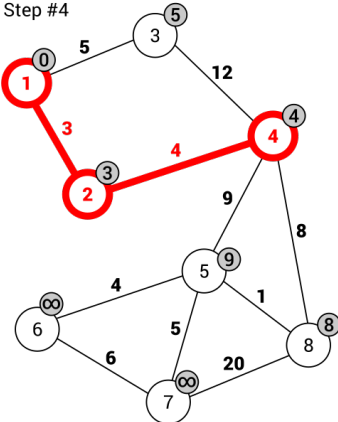
Step #2



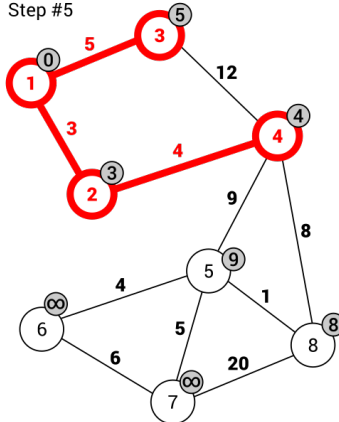
Step #3



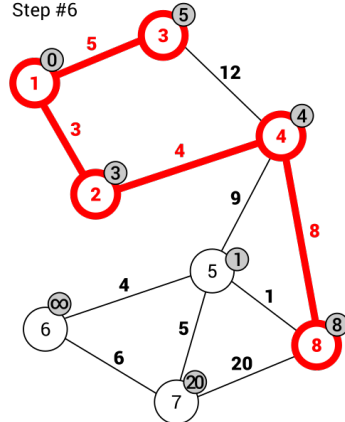
Step #4



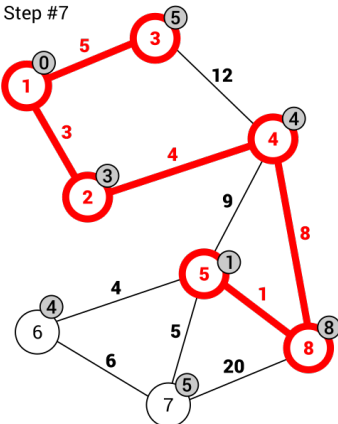
Step #5



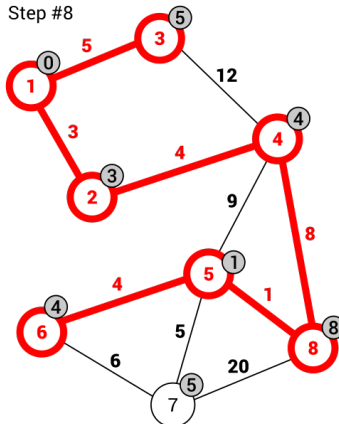
Step #6



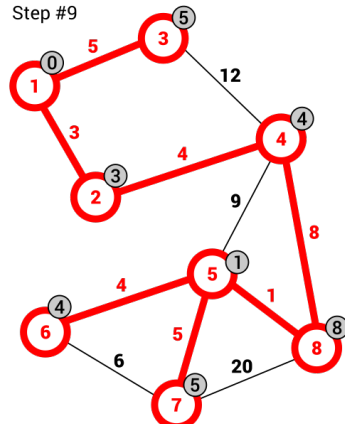
Step #7

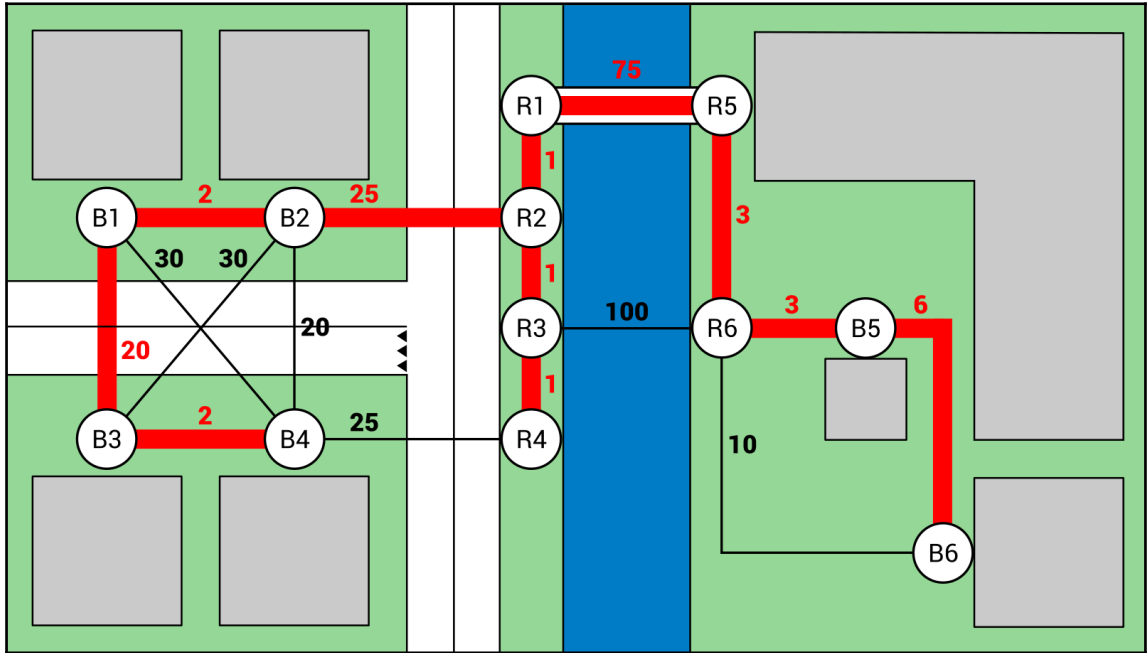
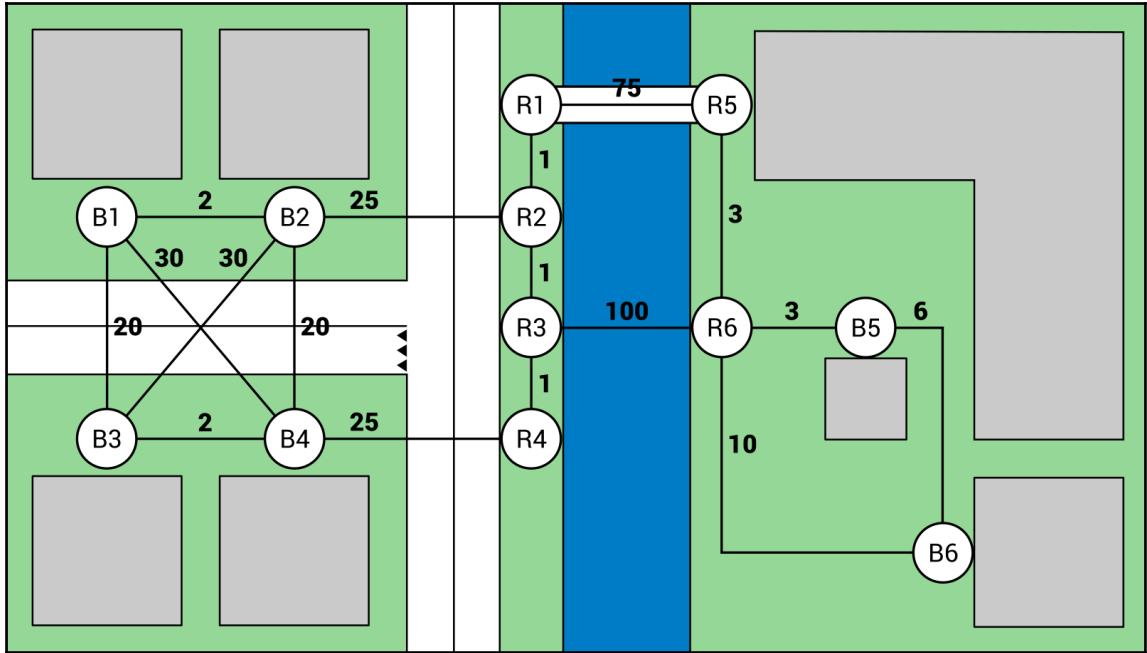


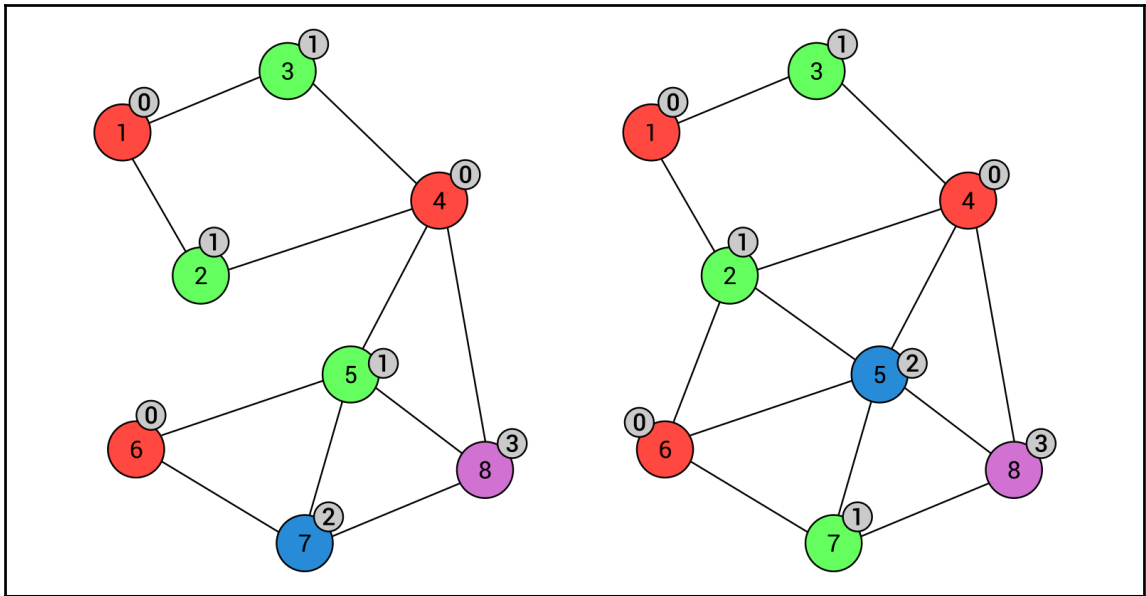
Step #8

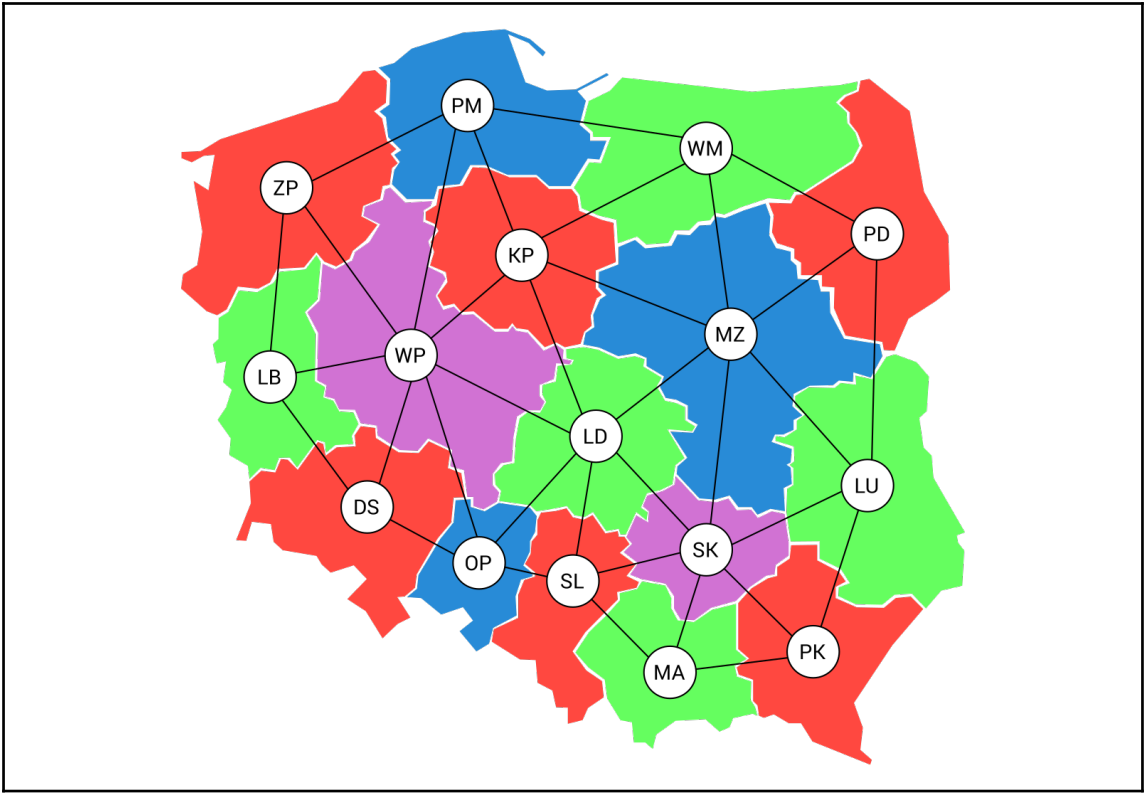


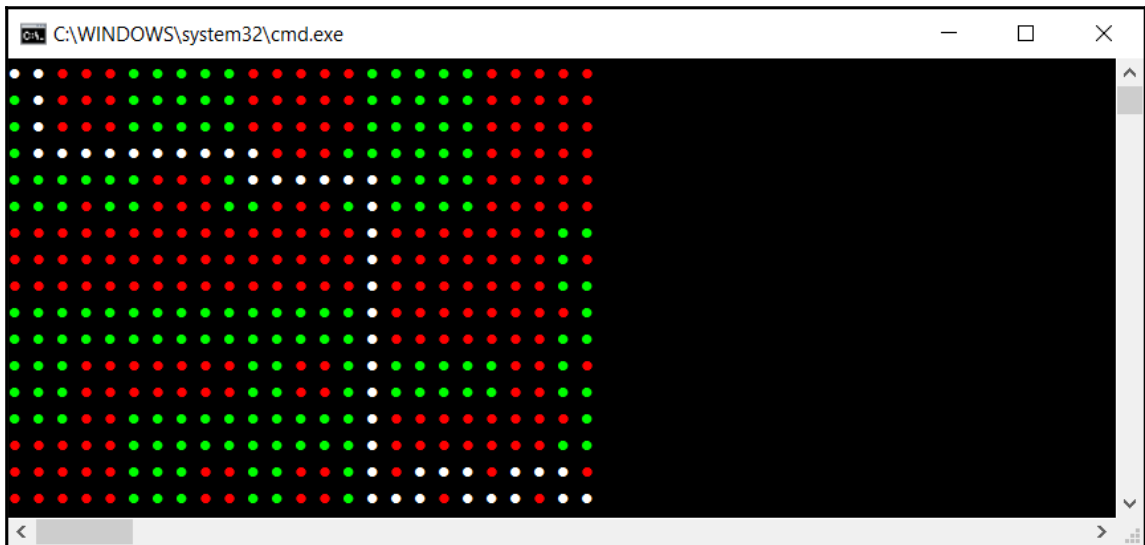
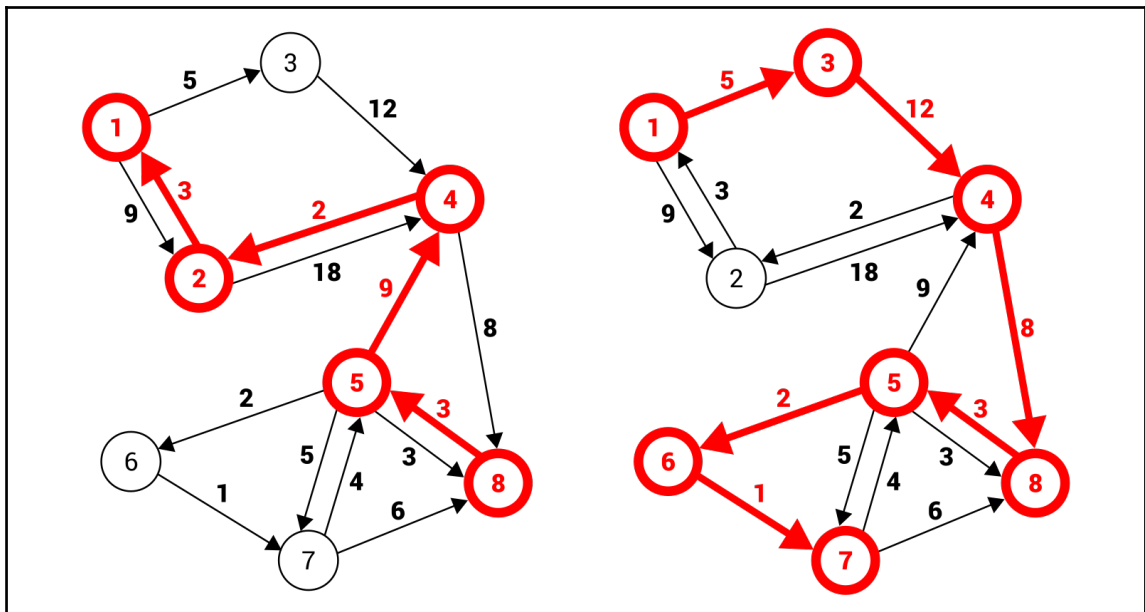
Step #9



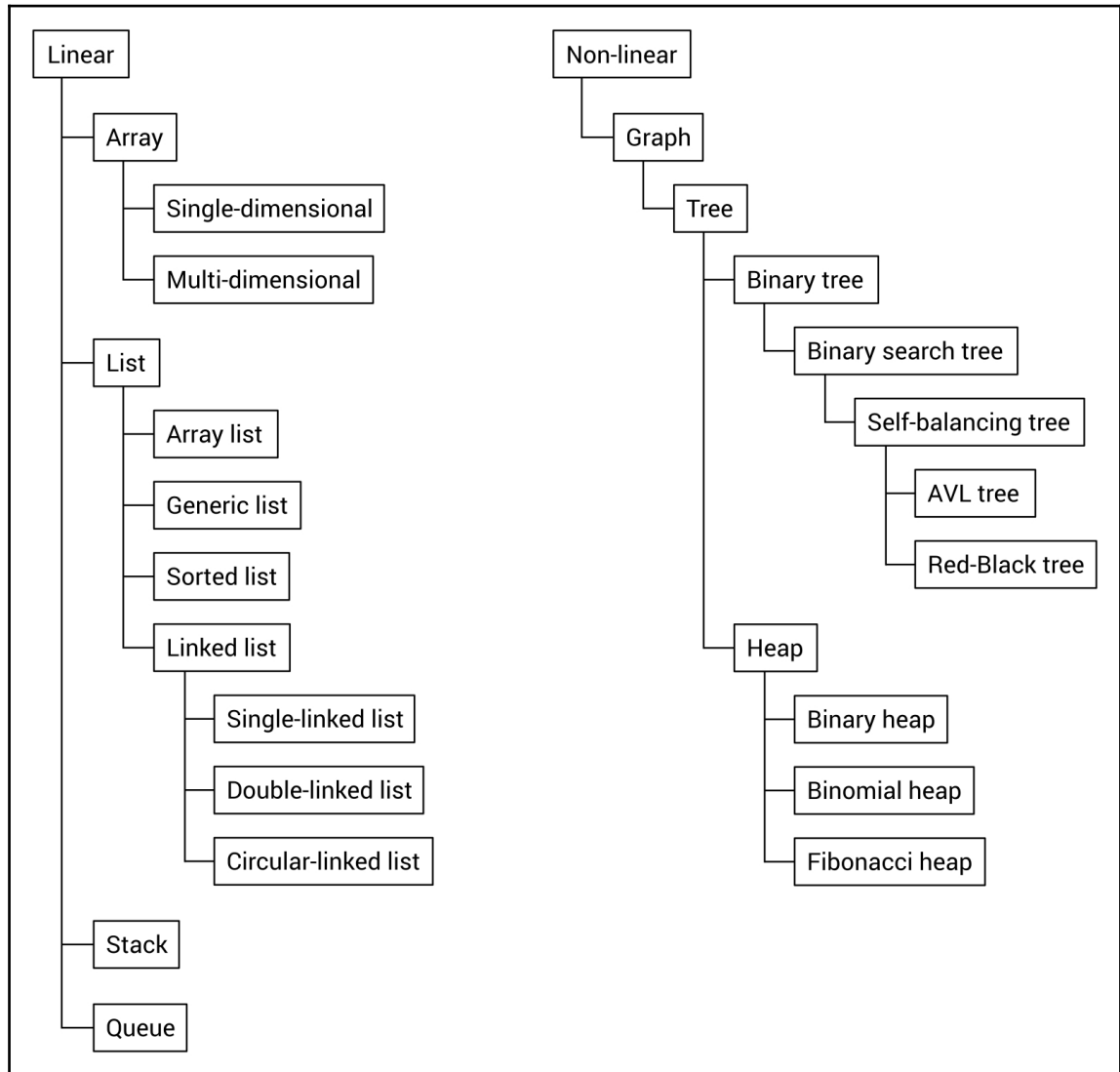








Chapter 7: Summary



SINGLE-DIMENSIONAL

9
array[0]
-11
array[1]
6
array[2]
-12
array[3]
1
array[4]

MULTI-DIMENSIONAL

9	5	-9
array[0,0]	array[0,1]	array[0,2]
-11	4	0
array[1,0]	array[1,1]	array[1,2]
6	115	3
array[2,0]	array[2,1]	array[2,2]
-12	-9	71
array[3,0]	array[3,1]	array[3,2]
1	-6	-1
array[4,0]	array[4,1]	array[4,2]

JAGGED ARRAY

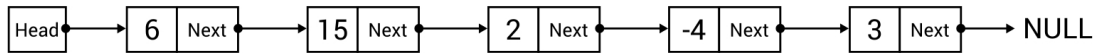
array[0]	9	5	-9
	array[0][0]	array[0][1]	array[0][2]

array[1]	0	-3	12	51	-3
	array[1][0]	array[1][1]	array[1][2]	array[1][3]	array[1][4]

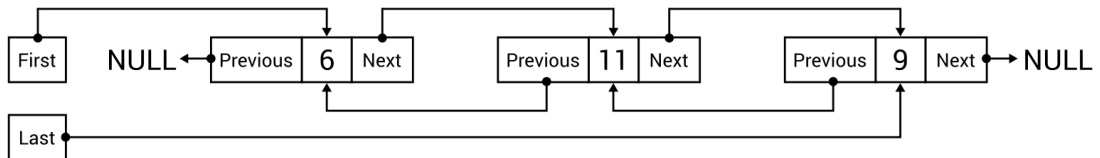
array[2]	NULL
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array[3]	54
	array[3][0]

SINGLE-LINKED LIST



DOUBLE-LINKED LIST



CIRCULAR-LINKED LIST

