

COME103 / CENG111 Computer Programming I Lab - 9 6 December 2021

PROGRAMS

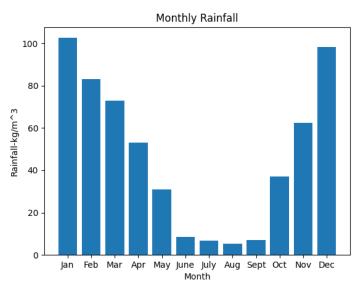
 According to the Turkish State Meteorological Services, average monthly rainfall precipitations in millimeters from 1991-2020 are given in the following list*. Note that the first value corresponds to January and last value corresponds to December.

```
rainfall=[ 102.6,83.1,72.9,53.1,31.1,8.4,6.9,5.2,7.1,37.2,62.3,98.4 ]
```

Write a program that presents the rainfall data for 12 months on a Bar Chart. The title for the chart will be "Monthly Rainfall". Also set the labels of the x- axis and y-axis. Lastly the x-ticks of the graph should be strings as Jan, Feb, Mar, Apr etc.

*https://www.mgm.gov.tr/veridegerlendirme/il-ve-ilceler-istatistik.aspx?m=GAZIANTEP

You should obtain the following graph at the end of your program.



2. Write a program in which 20 integers are generated randomly within the range of 1 to 100 by using random module functions. The program prints the numbers to the screen in the order they are generated, in ascending order, and descending order such that all numbers in one line. Also the program should computes and displays; the total, average, maximum, minimum, and also how many of them are even or odd.

By the end of the program, generated and computed information will be printed to screen as shown below.

```
Generated Numbers
Original Order: 7 78 66 40 74 22 71 23 31 48 76 5 92 96 68 91 38 37 52 73
Ascending Order: 5 7 22 23 31 37 38 40 48 52 66 68 71 73 74 76 78 91 92 96
Descending Order: 96 92 91 78 76 74 73 71 68 66 52 48 40 38 37 31 23 22 7 5
Total of the Numbers: 1088
Average of the Numbers: 54.40
Maximum of the Numbers: 96
Minimum of the Numbers: 5
Number of evens: 12
Number of odds: 8
```

Note: You should use a list to store the generated values. Then process this list to compute the necessary information.