# Conditional Structures

1. Write a program that prompts the user to input a number and display if the number is even or odd.

2. Write a Python program that takes an age as input and determines whether a person is eligible to vote. If the age is 18 or above, print "You are eligible to vote." Otherwise, print "You are not eligible to vote yet.".

3. Write a program that prompts the user to input two integers and outputs the largest.

4. Write a program that prompts the user to enter a number and determines whether it is positive, negative, or zero. The program should print "Positive" if the number is greater than 0, "Negative" if the number is less than 0, and "Zero" if the number is 0.

5. Write a program that prompts the user to enter their age and prints the corresponding age group. The program should use the following age groups:

0-12: Child
13-19: Teenager
20-59: Adult
60 and above: Senior Citizen

6. Write a program that prompts the user to input a number from 1 to 7. The program should display the corresponding day for the given number. For example, if the user types 1, the output should be Sunday. If the user types 7, the output should be Saturday. If the number is not between 1 to 7 user should get error message as shown in sample output.

7. Write a program that prompts the user to enter their weight (in kilograms) and height (in meters). The program should calculate the Body Mass Index (BMI) using the formula: BMI = weight / (height * height). The program should then classify the BMI into one of the following categories:

less than 18.5 - Underweight
BMI between 18.5 and 24.9 - Normal weight
BMI between 25 and 29.9 - Overweight
BMI 30 or greater - Obesity

8. The marks obtained by a student in 3 different subjects are input by the user. Your program should calculate the average of subjects and display the grade. The student gets a grade as per the following rules:

Average Grade
90-100 A
80-89 B

70-79 C
60-69 D
0-59 F

9. The roots of the quadratic equation $ax^2 + bx + c = 0$, $a \neq 0$ are given by the following formula:

$$\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

In this formula, the term $b^2 - 4ac$ is called the discriminant. If $b^2 - 4ac = 0$, then the equation has two equal roots.
If $b^2 - 4ac > 0$, the equation has two real roots. If $b^2 - 4ac < 0$, the equation has two complex roots.

Write a program that prompts the user to input the value of a (the coefficient of $x^2$), b (the coefficient of x), and c (the constant term) and outputs the roots of the quadratic equation.

10. Write a program that prompts the user to enter three numbers and sorts them in ascending order. The program should print the sorted numbers.

11. Write a program that prompts the user to input three integers and outputs the largest.

12. Write a program that prompts the user to input a character and determine the character is vowel or consonant.

13. Write a program that prompts the user to input a year and determine whether the year is a leap year or not.
Leap Years are any year that can be evenly divided by 4. A year that is evenly divisible by 100 is a leap year only if it is also evenly divisible by 400. Example:

1992 Leap Year
2000 Leap Year
1900 NOT a Leap Year
1995 NOT a Leap Year

14. Write a program that prompts the user to input number of calls and calculate the monthly telephone bills as per the following rule:
Minimum Rs. 200 for up to 100 calls.
Plus Rs. 0.60 per call for next 50 calls.
Plus Rs. 0.50 per call for next 50 calls.
Plus Rs. 0.40 per call for any call beyond 200 calls.