Practical Number	09
Areas covered	Lists

1. Create a list called “movies” containing at least five of your favorite movie titles in order of preference (the first movie in the list should be your most favorite, the second in the list should be your second favorite and so on).

   Write Python codes to

   I. Print your most favorite and least favorite movies from the list using indexing.
   II. Print your most favorite and least favorite movies from the list using negative indexing.
   III. Add a new movie called "Water World" which is your new least favorite to the above list.
   IV. Print the updated list of movies.
   V. Print the total number of movies in the list.

2. You are organizing an event for your colleagues at the university. To encourage registration, the participants will be distributed some registration gifts based on their order of registration.

   Gift Distribution Rules:

   - The first 3 participants receive a free t-shirt.
   - Participant 4 – 7 to register, receive a pen.
   - Participants 8 – 10 to register, receive a sticker.

   Create a list called participants containing the names (only the first name) of 12 participants who have registered for the event in the order they signed up.

   Write a Python program to print below details using ***list slicing***

   I. Print the participants who received free t-shirts.
   II. Print the participants who received pens.
   III. Print the participants who received stickers.

3. Create a list called “numbers” containing integers from 1 to 7 and write the python program to,
    I. Create a new list called “squares” that contains the corresponding square values of each item in the list.
    II. Update the same list “numbers” to contain the corresponding square values of each item in the list.

4. You have a list called “integers” containing the values [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]. Write a Python program to get the below output when printed the list “integers”. (Hint: Use list slicing)

    Output = **[1, 12, 15, 4, 5, 20, 17, 28, 9, 10]**

5. Assume you are managing the inventory for a bookstore. The prices of the books are stored in the below Python list.

    book_prices = **[15.99, 20.99, 24.50, 12.75, 30.00]**

    However, there is a mistake in the list where one of the book prices is incorrectly listed as $20.99. Write a python program to correct this incorrect price to $45.50.

6. You are given below two lists containing marks obtained by two groups of students for a Math test:

    group1_marks = **[85, 92, 78, 88, 95]**

    group2_marks = **[90, 83, 87, 79, 91]**

    Write a Python program to:
    I. Combine the marks of both groups into a single list and print it
        a. Using extend() method
        b. Using list operators.
    II. Sort the marks and print the highest mark obtained by any student from both groups. (Hint: use negative indexing)

7. Sort the below list in the descending order.

fruits = **["apple", "orange", "banana", "mango", "cherry", "watermelon"]**

8. Create a list containing the values 1, 2 and 3. Repeat the values 3 times to get the below output.

Output = **[1, 2, 3, 1, 2, 3, 1, 2, 3]**

I. Using loops (Hint: use the nested loops)

II. Using + operator

III. Using * operator