1. **Write a program contains a function to accept an integer number and display its reverse, a function to return the number of digits in a given number, and a function to accept two numbers and multiply the first number by itself the number of times indicated by the second number. In main function, define two integer numbers, and apply all functions on them.**

2. **Write a program contains a function to read two numbers (coordinates of point), a function to display two numbers as a point's format, a function with four default parameters $x_1$ , $y_1$ and $x_2$ , $y_2$ to return the distance between them ( the first point's coordinates $x_1$ , $y_1$ , and the second point's coordinates $x_2$ , $y_2$ ), and a function to swap four parameters(swap $x_1$, $x_2$ and $y_1$ , $y_2$). In main function, define four numbers (two point's coordinates), and apply all functions on them**

3. **Write a program contains a function to read an array of n integer numbers, a function to test a given number prime or not, and a function to test a given number even or not. Write two versions of overloaded functions, the first version function returns the average of all prime numbers in a given array. The second version returns the average of even numbers or the average of odd numbers in a given array according to the value of a given character ('E' or 'e') or ('O' or 'o'). In main function, define an array of m integer numbers, a character c, and apply all functions on them.**

# Homework

4. **Write a program contains the following:**
    i. **function to read an array of n numbers**
    ii. **function to display an array of n numbers**
    iii. **function to reverse the elements of a given array**
    iv. **function to search for an element if exist in a given array**
    v. **function to replace a given number with another exists in the given array (use search function)**

**In main function, define three arrays, and apply all functions on them.**