

## **ASSIGNMENT 03**

**Submission Date: 23-03-2020**

1. Write a function that takes an integer as parameter and returns the sum of its digits.
2. Write a function that takes an integer as parameter and returns the reversed number.
3. Write a function that takes two numbers as parameters and returns their HCF.
4. Write a function that takes two numbers as parameters and returns their LCM.
5. Write a function that checks if a number is prime or not. If the number is prime the function returns true, otherwise false.
6. Write a function that sorts an array of numbers. In the main function, first create and print the unsorted array, then use the function to sort the array, finally print the sorted array from the main function.
7. Write a function that takes a string as parameter and returns the number of words in that string.
8. Write a function that takes a string as a parameter, changes all the letters to uppercase letters and returns the updated string.
9. Write a function that takes a string as parameter and returns true if the string is a palindrome, if not, it returns false.
10. Write a function that takes two strings as parameter and returns true if the second string is a substring of the first string, otherwise returns false.
11. Write a function that takes a student ID as a string parameter, then checks if the ID is valid. If the ID is valid the function returns true, otherwise it returns false. Following are the rules for a valid id:
  - a. The ID must contain exactly 7 digits. No letters or symbols are allowed.
  - b. The third digit of the ID can be 1, 2 or 3. No other digit is allowed as the third digit.
  - c. The last 4 digits cannot be all zeroes (0000).