**Scenario based Set-2**

**Scenario 1:** Write logic to determine whether the amount is positive, negative, or zero.

**Logic :**

1. Get an input as amount.
2. Check whether the input is positive, negative, or zero using if condition.
3. If the input is Positive, print as Positive value.
4. elif the input is Negative, print as Negative value.
5. if it is Zero, print as You have entered a zero value.

**Scenario 2:** Write logic to compute the sum of the digits of a given number.

**Logic :**

1. Get the input and initialize a variable (sum) to zero.
2. Convert the input as string number.
3. Use for loop for iteration.
4. In each iteration, add the number to sum by converting to integer.
5. Repeat the iteration till the last value
6. Final sum value is printed.

**Scenario 3:** Write logic to take a number and return its reverse.

**Logic:**

1. Get an input number.
2. Convert the number into string.
3. Do the number reversal.
4. Print the reverse number.

**Scenario 4:** Write logic to check if a given number is prime.  
**Logic:**

1. Get a input number.
2. Declare a function with an argument.
3. Using If condition to check, if the number is equal to 1, then it is not prime.
4. If it is equal to 2, then it is prime.
5. Make a for loop and do iteration for i value for a range of 2 to square root of that number +1.
6. Check the condition if the number / i equals to zero, return and print not prime.
7. Return and print Prime outside the loop if the condition false.

**Scenario 5:** Write logic to find the factorial of a given number using recursion.

**Logic:**

1. Get an input number.
2. Check the number < 0, print it as negative value
3. Initialize fact variable as zero.
4. If the number is 0, return fact.
5. Using for loop for i in range of 1 to n+1, multiply the i with fact value
6. Repeat the iteration till n+1 and return the fact value

**Scenario 6:** Write logic to check whether a given number is an Armstrong number.

**Logic:**

1. Get an input number
2. Convert the number into string and find the length in digit.
3. Using for loop with a range of i in digit, do the power of each i value.
4. Initialize the sum = 0 and add the each i value to the power of digit.
5. Check the sum value with the input and if it is equal print Armstrong number else not an Armstrong number.

**Scenario 7:** Write logic to swap first and last character on a given string.

**Logic:**

1. Get an input string.
2. Check the length of the string is less than 2 then, print as it is.
3. Do the swap of first and last digit
4. Print the swap string

**Scenario 8:** Write logic to convert a given decimal number into its binary equivalent.

Logic :

1. Get an input number.
2. Assign a empty string for binary value.
3. Divide the input by 2 and add the remainder to the empty binary string.
4. Repeat the iteration using while the input >0 and complete the iteration till that number = 0
5. Do the reversal of that binary value and Print it.

**Scenario 9:** Write logic to find the longest word in a sentence.  
Logic:

1. Get an input string as a sentence
2. Split the sentence into words.
3. Initialize an empty string for long word.
4. Using for loop iterate each word by comparing with long word.
5. Find the long word and print it.

**Scenario 10:** Write logic to check whether two given strings are anagrams.  
Logic:

1. Get the two input strings.
2. Sort the two strings and convert it into upper case.
3. Compare the two strings. If both the strings are equal, Print as “Anagram” else “No Anagram”