

IDC101-Introduction to computers (Shell scripting)

Lab tasks – **Session 02**

November 21 2022

- Name your program as rollNo-WS-No-QNo (for example, if you are writing program for Q1, then, you should name it as rollNo-WS-02-Q1.sh)
- Q 1. Write a script to find sum as well as product of a given set of 5 natural numbers input by a user. Make script interactive, which accepts number from user.
- Q 2. Write a script to so same task as in Q1 but the user can give any number of inputs. The script can stops when user inputs number 0 otherwise it can keep accepting inputs.
- Q 3. Write a script to find maximum and minimum from a given set of numbers input by a user. Make script interactive, which accepts number from user. Design appropriate stop condition.
- Q 4. Write a script to find whether a number is divisible by 2 or 3. There is mathematic operator (modulo or remainder operator (%)) which returns remainder when dividend is divided by divisor. For example, $5\%2$ returns 1. $4\%2$ returns 0).
- Q 5. Write a shell script to find whether 3 user input numbers are Pythagorean triplets (a, b and c such that $a^2+b^2=c^2$). Accept user input as a, b and c in order such that $a < b < c$. Modify your program to accept not in any order and find out whether it is Pythagorean triplet.
- Q 6. Write a script to determine the n^{th} (T^n) triangular number using the formula ($T^n=n*(n+1)/2$). (A *triangular number* is a number that can be represented by a pattern of dots arranged in an equilateral triangle with the same number of dots on each side. It has many interesting properties).