# IDC101-Introduction to computers (Python programming)

Lab tasks – **Session 05**                                    December 12-13 2022

- Name your Colab sheet as rollNo-WS-No.ipynb (for example, if you are making colab sheet for WS5 then it should be named as: <u>rollNo-WS-05.ipynb)</u>

Learn to use:
- Defining a string, indexing and slicing string.
- **If... elif ... else condition**

<u>Example</u>: Suppose you need to classify a person as an Infant (<2), kid (2-12), teen (13-18) and adult (>18) based on age. The program will go as follows:

```
age=int(float(input('Enter age of person ')))
if age <= 2:
  print('Person is an Infant')
elif age <= 12:
  print('Person is a kid')
elif age <= 18:
  print('Person is a teen')
else:
  print('Person is an adult')
```

- **While condition**

Example: Suppose you want to count backward from 9 to 0 using while loop then,

```
i=9
while i >= 0:
  print(i)
  i=i-1
```

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Q 1.  Write a program to find whether an input number is divisible by 9. Improvise the program and take two inputs from user, viz. Dividend and Divisor and print whether Dividend is divisible by Divisor.

Q 2.  Find whether an input string is palindrome:
   a.  without using string slicing
   b.  with using string slicing.

Q 3.  Improvise Q2 and make it case insensitive. (use string method .lower () or .upper() see lecture slides).

Q 4.  Write a program to whether a number is prime or not.

Q 5.  Without using any string python method. Write a program count the occurrence of character 'a', 't', 'c', 'g' in the sequence given below. Improvise the program to make it case insensitive.

**sequence=**'accttcagacttgggaagattggcatcttcgccaccgggtactcggcccacggctcctcc
tgacacgtatagtcactctagtgccaacgagttatttccgccgatgtatgagatacaaga
tgcttatgggggcaggtgacgaaagcttctaccagtcttctttgttagtaagggcacact
ttgtcgccccagcacgcatgcccactggtagcatgccgtagatcaatagcctttctcttg'