

Aim: Flow control; conditional executions and loops.

1. Write a Python script that reads two integers, (i and j) from the user and displays the numbers between them in increasing order excluding i and j. Please do not forget to check which one of the given numbers is smaller, so that you can start from a small number. (If the difference between given numbers is smaller than 2, exit the program.)

SAMPLE OUTPUT 1 (bold parts are entered by user):

```
Please enter the first number: 2
Please enter the second number: 6
3 4 5
```

SAMPLE OUTPUT 2 (bold parts are entered by user):

```
Please enter the first number: 1
Please enter the second number: 2
Exiting...
```

SAMPLE OUTPUT 3 (bold parts are entered by user):

```
Please enter the first number: 3
Please enter the second number: -4
-3 -2 -1 0 1 2
```

2. Write a Python script that reads an integer value from the user. This value will represent the temperature degree (in Celsius) for today. Depending on this temperature value your program should display a comment on the weather of the day. If given value is **below 10**, the program should say “**It is a cold day.**” If the given value is **more than 30**, it should say “**It is hot!!**”. Lastly, if the given number is **in between**, the program should say “**It is a pleasant day...**”. After completing this first part, modify and improve your script to make it read any number of values until the user enters -1000. If the user enters -1000, the program will immediately exit.

SAMPLE OUTPUT (bold parts are entered by user):

```
Please enter the temperature: 9
It is a cold day.
Please enter the temperature: 20
It is a pleasant day...
Please enter the temperature: 40
It is hot!!
Please enter the temperature: -1000
Exiting the program...
```

TODO@HOME

Write a Python script to decide and print out whether an integer “n” given by the user is prime or not.

SAMPLE OUTPUT 1 (bold parts are entered by user):

```
Please enter a number: 18  
18 is not a prime number
```

SAMPLE OUTPUT 2 (bold parts are entered by user):

```
Please enter a number: 17  
17 is a prime number
```