

Date: 10/9/25

TASK 6.1

Implement Conditional, Control and Looping statements

Aim: To implement Conditional Control and Looping statements using Python

Algorithm:

1. Start
2. Get the input mark from the user
3. With the use of an if-else statement do.
 - If mark ≥ 90 print grade "A"
 - If mark is between 80 and 89 print grade "B"
 - If mark is between 70 and 79 print grade "C"
 - If mark is between 60 and 69 print grade "D"
 - If mark is below 60, print grade "F"
4. Stop

Program:

```
score = int(input("Enter score:"))
```

```
if score  $\geq 90$ :
```

```
    print("The grade is A")
```

```
elif score  $\leq 89$  and score  $\geq 80$ :
```

```
    print("The grade is B")
```

```
elif score  $\leq 79$  and score  $\geq 70$ :
```

```
    print("Grade is C")
```

```
elif score  $\leq 69$  and score  $\geq 60$ :
```

```
    print("Grade is D")
```

```
else:
```

```
    print("Grade is F")
```

output

The first 10 natural numbers are

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

Task 2

You are developing an educational program to help young students learn about natural numbers. One of the features of the program is to study the first 10 natural numbers. To do this, we will write a Python program that uses a for loop to print the first 10 natural numbers.

Algorithm:

1. Start
2. Display the first 10 natural numbers are:
3. Use for loop generating the numbers
4. Print the output
5. Stop

```
print("The first 10 natural numbers are:")  
for i in range(1, 11):  
    print(i)
```



Output

Enter the number 5

The number of digits in 5 (1)

Enter the number : 55

The number of digits in 55 (2)

1000
10000
100000
1000000

For (1) digit, the number is 1000

For (2) digit, the number is 10000

For (3) digit, the number is 100000

(1) digit, the number is 1000

(2) digit, the number is 10000

(3) digit, the number is 100000



Task 3

You are working on a feature for a financial application that involves validating user input. One of the requirements is to count the total number of digits in a given number.

Algorithm:
= = =

1. Start
2. Get the input from the user
3. Convert the integer to string using str()
4. Use len function to find number of digits
5. Print the output

Program:
= = =

```
digit = int(input("Enter the number:"))
```

```
string = str(digit)
```

```
count = len(string)
```

```
print("The number of digits is", digit, ":", count)
```

VEL TECH - CCS	
EX NO.	5
PERFORMANCE (5)	5
RESULT AND ANALYSIS (3)	5
VIVA VOCE (3)	5
RECORD (4)	4
TOTAL (15)	
SIGN WITH DATE	15

Result:

Thus the python program for the implementation of conditional control and looping statements was done successfully.