

Task-2: Implement conditional, control and looping statements.

Aim:

To implement conditional control and looping statements using Python

a) you are developing a simple grade system
needs to determine the grade of a student
based on their score in a test the grading
system following these rules

If the score is 90 or above, the grade
is "A".

If the score is between 80 and 89 the
grade is "B".

If the score is below 60, the grade is
"F".

Algorithm

1) Start

2) Get the input mark from the user

3) with the use of if else if-else
statement do.

4) If the marks ≥ 90 print grade "A".

5) If the mark is between 80 and 89 print
grade "B".

6) If the marks is between 60 and 69
print grade "C"

7) If the mark is between 60 and 69
print grade "D"

8) If the marks is below 60, print
grade "F"

Program:-

```
score = int(input("Enter the score:"))
if score >= 90
    print ("The grade is A")
elif(score <= 89 and score >= 80)
    print ("The grade is B")
elif(score <= 79 and score >= 70)
    print ("The grade is C")
elif(score <= 69 and score >= 60)
    print ("The grade is D")
else:
    print ("The grade is F")
```

entered the score: 60
The grade is 0
Instructions to input 133 (hexadecimal 65)
which will be converted to
decimal 92358 (hexadecimal
92358, 92358 of 65 of score, 92

92358 hex 08 converted to decimal 92358 92
?8" & 92

92358 hex .08 converted to decimal 92358

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"B" value below 08 = < 256 - 256

which 92358 hex 08 converted to decimal 92358

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which 08 converted to decimal 92358

b) you are developing an education program to help young students learn about natural numbers. One of the features of the program is to display the first 10 natural numbers for the user. Write a Python program that uses a for loop to print the first 10 natural numbers.

Algorithm:

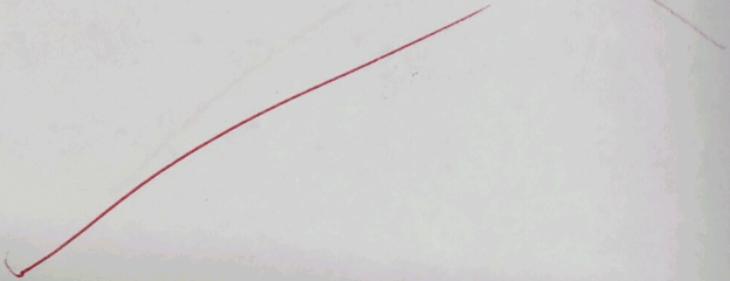
1. start
2. display "The first 10 natural numbers are:"
3. use a for loop for generating the numbers.
4. print the output.
5. stop.

Program

~~print~~ # displaying the first 10 natural numbers
print("The first 10 natural numbers are")

for i in range(1, 11):
 print(i)

- The first 10 natural numbers are:
- 1
 - 2
 - 3
 - 4
 - 5
 - 6
 - 7
 - 8
 - 9
 - 10



Output
Enter the number: 55
The number of digit in 55 is 2
Entered the number: 55
The number of digits in 55 is 2

~~old di most good, the IT IS going to cost
(i) taking~~

You are working on a software 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 the 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 in", digit  
is count)
```

Result:

Thus, the python program to implement conditional control and loop statements entered code done

| VELTECH | |
|-------------------------|---------------|
| EX-NB. | SUCCESS STORY |
| PERFORMANCE (5) | 5 |
| RESULT AND ANALYSIS (5) | 5 |
| VIVA VOC (5) | 5 |
| RECIPROK (5) | 5 |
| TOTAL (20) | 20 |
| SIC - M. T. DATE | 08/08/2023 |

(Signature)