

(1) Write a program to accept percentage from the user and display the grade according to the following criteria: Marks Grade > 90 A > 80 and <= 90 B >= 60 and <= 80 C below 60 D.

```
In [1]: a = float(input("Enter percentage : "))
if a > 90:
    print("your grade is A")
elif a > 80 and a <= 90:
    print("your grade is B")
elif a >= 60 and a <= 80:
    print("your grade is C")
else:
    print("your grade is D")
```

Enter percentage : 97  
your grade is A

(2) Write a Python program to check if a number is positive, negative or zero.

```
In [2]: a = int(input("Enter number : "))
if a<0:
    print(a,"is negative.")
elif a>0:
    print(a,"is positive.")
else:
    print(a,"is negative.")
```

Enter number : -2  
-2 is negative.

(3) Write a Python program to check if variable is of integer or string.

```
In [3]: a = '10'
if type(a) == str :
    print(a,"is string type")
else:
    print(a,"is integer type")
```

10 is string type

(4) Write a Python Program to Check given year is Leap Year or not.

```
In [4]: a = int(input("Enter year : "))
if a % 4 == 0 or a % 100 == 0 or a % 400 == 0:
    print(a,"is a leap year.")
else:
    print(a,"is not a leap year.")
```

Enter year : 2001  
2001 is not a leap year.

(5) Python Program to Print Natural Number.

```
In [5]: n = int(input("Enter number :"))  
for i in range(1,n+1):  
    print(i)
```

Enter number :6

1  
2  
3  
4  
5  
6

(6) Python Program to Print Even Numbers from 1 to N.

```
In [6]: n = int(input("Enter how many even number you want : "))  
list1 = []  
for i in range(2,n*2+1,2):  
    list1.append(i)  
print(list1)
```

Enter how many even number you want : 9

[2, 4, 6, 8, 10, 12, 14, 16, 18]

(7) Python Program to Print all Prime Numbers in an Interval.

```
In [7]: n1 = int(input("Enter number : "))  
prime = False  
for i in range(2,n1):  
    if n1 % i == 0:  
        prime = False  
    else:  
        prime = True  
if prime == True:  
    print(n1,"is prime number.")  
else:  
    print(n1,"is not prime number.")
```

Enter number : 7

7 is prime number.

(8) Python Program to Print Natural Numbers in Reverse.

```
In [8]: list1 = []  
n1 = int(input("Enter number :"))  
for i in range(n1,0,-1):  
    list1.append(i)  
print(list1)
```

Enter number :10

[10, 9, 8, 7, 6, 5, 4, 3, 2, 1]

(9) Python Program to find Sum of Even and Odd Numbers from 1 to N.

```
In [11]: sum1 = 0
sum2 = 0
for i in range(1,8):
    if i % 2 == 0:
        sum1 += i
    else:
        sum2 += i
print("sum of even numbers is :",sum1)
print("sum od odd numbers is :",sum2)
```

sum of even numbers is : 12

sum od odd numbers is : 16

(10) Python Program to Display the Multiplication Table.

```
In [12]: n1 = int(input("Enter number :"))
for i in range(1,8):
    print(n1,"*",i,"=",n1*i)
```

Enter number :6

6 \* 1 = 6

6 \* 2 = 12

6 \* 3 = 18

6 \* 4 = 24

6 \* 5 = 30

6 \* 6 = 36

6 \* 7 = 42

(11) Python Program to Check Number is Divisible by 5 in a given interval Order.

```
In [13]: list1 = []
n1 = int(input("Enter number :"))
for i in range(1,n1+1):
    if i % 5 == 0:
        list1.append(i)
    else:
        pass
print(list1)
```

Enter number :10

[5, 10]

(12) Write a Python program to print negative numbers in an interval.

```
In [14]: list1 = []  
         for i in range(-11,1):  
             if i < 0:  
                 list1.append(i)  
         print(list1)
```

```
[-11, -10, -9, -8, -7, -6, -5, -4, -3, -2, -1]
```