September -09:

Take percentage from user and print their result

85 - 100 ⇒ Distinction

60 - 84 ⇒ First class

50 - 59 ⇒ Second class

35 - 59 ⇒ pass

0 - 34 ⇒ fail.

Code:

```
p = float(input("enter your percentage:"))
print("percentage : ", p)
if (p<=100 and p>=85):
    print("Distinction")
elif (p>=60 and p<=84):
    print("First class")
elif (p>=59 and p<=50):
    print("second class")
elif ( p>=35 and p<=59):
    print("pass")
elif (p>=0 and p<=34):
    print("Fail")
else:
    print("Invalid Data")
```

Write a program to check the given number is odd or even.

```
n = int (input ("Enter a number : "))

If (n%.2 == 0) :
    print ( "The number is even")

else :
    print ("The number is odd")
```

Write a program to check the given input is positive number, negative number or zero.

```
n = int (input ("Enter a value : "))

if (n >0):
    print ("positive number:")

elif (n <0):
    print ("Negative number:")

else:
    print ("zero") .
```

Types of Numbers:

1. Natural Numbers : 1, 2, 3 .... so on
2. Whole Numbers : 0, 1, 2, 3 .... so on
3. Integers : ... -3, -2, -1, 0, 1, 2, 3 ...
4. Rational Numbers : p/q form
5. Irrational Numbers : numbers cannot be expressed in p/q form (π, $\sqrt{2}$)
6. Real Numbers : Rational + Irrational
7. Complex Numbers : Numbers of the form a+bi
8. Prime numbers : numbers with only one factor 2, 3, 5, 7 ....

9. Composite Numbers: numbers with more than two factors.

4, 6, 8, 9 ....

10. Even numbers: Integers divided by 2 $-4, -6, 2, 4, 6 \ldots$

11. Odd numbers: Integers not divided by 2

$-3, -7, 3, 5, 7 \ldots$