

1) Write a program to check if a number is positive, negative or zero

### PROGRAM

```
numcheck.py > ...
1  num=int(input("enter number:"))
2  if num>0:
3      print("number is +ve")
4  elif num<0:
5      print("number is -ve")
6  else:
7      print("number is zero")
```

### OUTPUT

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS
Python + - [ ] [ ] ... ^ x

PS C:\Users\Admin\Desktop\task> & C:/Users/Admin/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Admin/Desktop/task/numcheck.py
enter number:8
number is +ve
PS C:\Users\Admin\Desktop\task> & C:/Users/Admin/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Admin/Desktop/task/numcheck.py
enter number:-8
number is -ve
PS C:\Users\Admin\Desktop\task> & C:/Users/Admin/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Admin/Desktop/task/numcheck.py
enter number:0
number is zero
PS C:\Users\Admin\Desktop\task> |
```

2) Write a program to check if a person is eligible for voting or not.  
conditions – age greater than or equal to 18 the person is eligible.

age less than 18 not eligible for voting

### PROGRAM

```
voting.py > ...
1  age=int(input("enter your age:"))
2  if age>=18:
3      print("You are eligible for voting ")
4  else:
5      print("You are not eligible voting ")
6
```

## OUTPUT

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS
Python + - [ ] [ ] ... ^ x

PS C:\Users\Admin\Desktop\task> & C:/Users/Admin/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Admin/Desktop/task/voting.py
enter your age:24
You are eligible for voting
PS C:\Users\Admin\Desktop\task> & C:/Users/Admin/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Admin/Desktop/task/voting.py
enter your age:15
You are not eligible voting
PS C:\Users\Admin\Desktop\task> |
```

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

## PROGRAM

```
oddeven.py > ...
1  num=int(input("enter number:"))
2  if num%2==0:
3      print(f"{num} is even number")
4  else:
5      print(f"{num} is odd number")
```

## OUTPUT

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS
Python + - [ ] [ ] ... ^ x

PS C:\Users\Admin\Desktop\task> & C:/Users/Admin/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Admin/Desktop/task/oddeven.py
enter number:8
8 is even number
PS C:\Users\Admin\Desktop\task> & C:/Users/Admin/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Admin/Desktop/task/oddeven.py
enter number:7
7 is odd number
PS C:\Users\Admin\Desktop\task> |
```

4) Write a program for grade classification based on percentage conditions

percentage = 90

grade A

percentage in between 80-90

grade B

percentage in between 70-80

grade C

percentage less than 70

fail

## PROGRAM

```
grade.py > ...
1  percentage=int(input("enter your percentage:"))
2  if percentage>=90:
3      print("Grade A")
4  elif percentage>=80 and percentage<=90:
5      print("Grade B")
6  elif percentage>=70 and percentage<=80:
7      print("Grade C")
8  elif percentage<70:
9      print("Fail")
10
```

## OUTPUT

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS
Python + - [ ] [ ] ... ^ x

PS C:\Users\Admin\Desktop\task> & C:/Users/Admin/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Admin/Desktop/task/grade.py
enter your percentage:90
Grade A
PS C:\Users\Admin\Desktop\task> & C:/Users/Admin/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Admin/Desktop/task/grade.py
enter your percentage:85
Grade B
PS C:\Users\Admin\Desktop\task> & C:/Users/Admin/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Admin/Desktop/task/grade.py
enter your percentage:78
Grade C
PS C:\Users\Admin\Desktop\task> & C:/Users/Admin/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Admin/Desktop/task/grade.py
enter your percentage:45
Fail
PS C:\Users\Admin\Desktop\task> |
```

5) Write a program to check the given year is a leap year or not

## PROGRAM

```
leapyear.py > ...
1  year=int(input("enter year:"))
2  if(year%100==0 and year%400==0) or (year%100!=0 and year%4==0):
3      print(f"{year} is a leap year")
4  else:
5      print(f"{year} is not a leap year")
```

## OUTPUT

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS
Python + - [ ] [ ] ... ^ x

PS C:\Users\Admin\Desktop\task> & C:/Users/Admin/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Admin/Desktop/task/leapyear.py
enter year:2024
2024 is a leap year
PS C:\Users\Admin\Desktop\task> & C:/Users/Admin/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Admin/Desktop/task/leapyear.py
enter year:2023
2023 is not a leap year
PS C:\Users\Admin\Desktop\task> |
```

6) Write a program to determine largest of three numbers.

### PROGRAM

```
largestnum.py > ...
1  num1=int(input("enter number1:"))
2  num2=int(input("enter number2:"))
3  num3=int(input("enter number3:"))
4  if num1>num2 and num1>num3:
5      print(f"{num1} is largest number")
6  elif num2>num1 and num2>num3:
7      print(f"{num2} is largest number")
8  else:
9      print(f"{num3} is largest number")
```

### OUTPUT

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS
Python + - [ ] [ ] ... ^ x

PS C:\Users\Admin\Desktop\task> & C:/Users/Admin/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Admin/Desktop/task/largestnum.py
enter number1:10
enter number2:20
enter number3:30
30 is largest number
PS C:\Users\Admin\Desktop\task> & C:/Users/Admin/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Admin/Desktop/task/largestnum.py
enter number1:30
enter number2:20
enter number3:10
30 is largest number
PS C:\Users\Admin\Desktop\task> & C:/Users/Admin/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Admin/Desktop/task/largestnum.py
enter number1:20
enter number2:30
enter number3:10
30 is largest number
PS C:\Users\Admin\Desktop\task> |
```

Activate Windows

## 7) Write program for a simple calculator.

### PROGRAM

```
simpleCalculator.py > ...
1  num1=int(input("enter number1:"))
2  num2=int(input("enter number2:"))
3  op=input("enter operator:")
4
5  if op=="+":
6      sum=num1+num2
7      print(sum)
8  elif op=="-":
9      sub=num1-num2
10     print(sub)
11 elif op=="*":
12     mul=num1*num2
13     print(mul)
14 elif op=="/":
15     div=num1/num2
16     print(div)
17 else:
18     print("please enter valid operator")
```

### OUTPUT

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS
Python + - [ ] [ ] ... ^ >

PS C:\Users\Admin\Desktop\task> & C:/Users/Admin/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Admin/Desktop/task/simpleCalculator.py
enter number1:20
enter number2:10
enter operator:+
30
PS C:\Users\Admin\Desktop\task> & C:/Users/Admin/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Admin/Desktop/task/simpleCalculator.py
enter number1:20
enter number2:10
enter operator:-
10
PS C:\Users\Admin\Desktop\task> & C:/Users/Admin/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Admin/Desktop/task/simpleCalculator.py
enter number1:20
enter number2:10
enter operator:*
200
PS C:\Users\Admin\Desktop\task> & C:/Users/Admin/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Admin/Desktop/task/simpleCalculator.py
enter number1:20
enter number2:10
enter operator:/
2.0
PS C:\Users\Admin\Desktop\task> [ ]

Activate Windows
Go to Settings to activate Windows.
```