

```
age = 18
if age >=18:
    print("you are eligible to vote.")

you are eligible to vote.
```

if else

```
num = int(input("enter a number"))
if num%2==0:
    print(" number is even ")
else:
    print(" number is odd ")

enter a number10
number is even

marks = int(input("enter the marks"))
if marks>=90:
    print("Grade A")
elif marks >=75:
    print("Grade B")
elif marks >=60:
    print("Grade c")
else:
    print("Grade D")

enter the marks60
Grade c

for i in range(5):
    print("Iteration:", i)

Iteration: 0
Iteration: 1
Iteration: 2
Iteration: 3
Iteration: 4

for i in range(5,60,10):
    print("Iteration:", i)

Iteration: 5
Iteration: 15
Iteration: 25
Iteration: 35
Iteration: 45
Iteration: 55

count = 0
while count< 7:
```

```
print("count:", count)
count +=1
```

```
count: 0
count: 1
count: 2
count: 3
count: 4
count: 5
count: 6
```

```
# break
for i in range(10):
    if i == 5:
        break
    print(i)
```

```
0
1
2
3
4
```

```
# continue
for i in range(10):
    if i == 5:
        continue
    print(i)
```

```
0
1
2
3
4
6
7
8
9
```

```
# pass
for i in range(10):
    if i == 5:
        pass
    print(i)
```

```
0
1
2
3
4
5
```

6
7
8
9

```
number =int(input("enter the number:"))  
if number % 2==0:  
    print("The number is even")  
else:  
    print("the number is odd")
```

enter the number:7
the number is odd

```
start=int(input(" enter the start of the range "))  
end=int(input(" enter the end of the range "))  
sum = 0  
for i in range( start , end+1):  
    sum += i  
    print("the sum is:", sum)
```

enter the start of the range 5
enter the end of the range 12
the sum is: 5
the sum is: 11
the sum is: 18
the sum is: 26
the sum is: 35
the sum is: 45
the sum is: 56
the sum is: 68

```
number =int(input(" enter a number "))  
factorial = 1  
for i in range(1, number+1):  
    factorial *=i  
print("the factorial is:",factorial)
```

enter a number 5
the factorial is: 120

```
year=int(input("Enter the year:"))  
if(year%4 == 0 and year%100!=0) or (year%400==0):  
    print("Leap year")  
else:  
    print("Not a leap year")
```

enter the number of terms 5
0 1 1 2 3

```

num1=float(input("Ente first number"))
num2=float(input("Enter second number"))
operation=input("Enter operation(+,-,*,/,%,//,**): ")
if operation == '+':
    print("result:", num1+num2)
elif operation == '-':
    print("result:", num1-num2)
elif operation == '*':
    print("result:", num1*num2)
elif operation == '/':
    print("result:", num1/num2)
elif operation == '%':
    print("result:", num1%num2)
elif operation == '//':
    print("result:", num1//num2)
elif operation == '**':
    print("result:", num1**num2)
else:
    print("Invaild operation")

```

```

Ente first number7
Enter second number6
Enter operation(+,-,*,/,%,//,**): **
result: 117649.0

```

```

year=int(input("Enter the year:"))
if(year%4 == 0 and year%100!=0) or (year%400==0):
    print("Leap year")
else:
    print("Not a leap year")

```

```

Enter the year:2023
Not a leap year

```

```

num1=float(input("Enter first number:"))
num2=float(input("Enter second number:"))
num3=float(input("Enter third number:"))
if num1>=num2 and num1>=num3:
    print("largest number is :", num1)
elif num2>=num3:
    print("Largest number is:", num2)
else:
    print("Largest number is:", num3)

```

```

Enter first number:7
Enter second number:6
Enter third number:15
Largest number is: 15.0

```

```

a=int(input("enter a number"))
if a>0:

```

```
    print("positive")
elif a<0:
    print("negative")
else:
    print("zero")

enter a number5
positive

start=int(input("Enter start of range"))
end=int(input("Enter end of range"))
even_number=0
for num in range(start, end+1):
    if num%2==0:
        even_number += num
    print("Sum of even number:",even_number)
```

```
Enter start of range2
Enter end of range10
Sum of even number: 2
Sum of even number: 2
Sum of even number: 6
Sum of even number: 6
Sum of even number: 12
Sum of even number: 12
Sum of even number: 20
Sum of even number: 20
Sum of even number: 30
```

reverse number