

even or odd number

```
In [32]: print("veerkumar.v.a")
num=int(input("enter a number:"))
if num%2==0:
    print("num is even")
else:
    print("num is odd")
```

```
veerkumar.v.a
enter a number:5
num is odd
```

positive or negative number

```
In [33]: print("veerkumar.v.a")
num=int(input("enter an integer:"))
if num>0:
    print("num is positive")
elif num<0:
    print("num is odd")
else:
    print("num is zero")
```

```
veerkumar.v.a
enter an integer:69
num is positive
```

prime number

```
In [34]: print("veerkumar.v.a")
num=int(input("enter a number:"))
count=0
for i in range(1,num+1):
    if(num%i==0):
        count +=1
if(count==2):
    print("the given number is prime")
else:
    print("the given number is not prime")
```

```
veerkumar.v.a
enter a number:76
the given number is not prime
```

pallindrome

```
In [35]: print("veerkumar.v.a")
num=int(input("enter a number:"))
num_str = str(num)
if num_str == num_str[::-1]:
    print("num is pallindrome")
else:
    print("num is not a pallindrome")
```

veerkumar.v.a
enter a number:89
num is not a pallindrome

sum of two numbers

```
In [36]: print("veerkumar.v.a")
a=int(input("enter a num:"))
b=int(input("enter a num:"))
sum=a+b
print(sum)
```

veerkumar.v.a
enter a num:87
enter a num:67
154

sum of two numbers using function

```
In [37]: print("veerkumar.v.a")
def calculate_sum(num1,num2):
    return num1+num2
num1=int(input("enter the number:"))
num2=int(input("enter the number:"))
sum=num1+num2
print("sum:",sum)
```

veerkumar.v.a
enter the number:78
enter the number:89
sum: 167

maximum of two numbers

```
In [38]: print("veerkumar.v.a")
num1=56
num2=78
result=max(num1,num2)
print("maximum:",result)
```

veerkumar.v.a
maximum: 78

minimum of two numbers

```
In [39]: print("veerkumar.v.a")
num1=89
num2=12
result=min(num1,num2)
print("minimum:",result)
```

```
veerkumar.v.a
minimum: 12
```

fibonacci series

```
In [41]: print("veerkumar.v.a")
num=int(input("enter the fibonacci sequence length:"))
a=0
b=3
print("the fibonacci series of sequence",num,"is;")
print(a,b,end="")
for i in range(2,num):
    c=a+b
    print(c,end="")
    a=b
    b=c
```

```
veerkumar.v.a
enter the fibonacci sequence length:7
the fibonacci series of sequence 7 is;
0 33691524
```

factorial number

```
In [42]: print("veerkumar.v.a")
n=int(input("enter the number:"))
f=1
if(n<0):
    print("not possible:")
elif(n==0):
    print("the factorial=1")
else:
    for i in range(1,n+1):
        f=f*i
print("factorial is:",f)
```

```
veerkumar.v.a
enter the number:65
factorial is: 824765059208247066672317030678549625218625855134543749292212313
4388955774976000000000000000000
```

reverse number

```
In [44]: print("veerkumar.v.a")
num_str="5865780868677"
reversed_str=num_str[::-1]
print("reversed number:",reversed_str)
```

```
veerkumar.v.a
reversed number: 7768680875685
```

swapping

```
In [45]: print("veerkumar.v.a")
a=int(input("a="))
b=int(input("b="))
a,b=b,a
print("after swapping:")
print("a:",a)
print("b:",b)
```

```
veerkumar.v.a
a=4
b=6
after swapping:
a: 6
b: 4
```

gcd of two numbers

```
In [46]: print("veerkumar.v.a ")
import math
num1=int(input("enter a number:"))
num2=int(input("enter a number:"))
result=math.gcd(num1,num2)
print("result:",result)
```

```
veerkumar.v.a
enter a number:87
enter a number:90
result: 3
```

random numbers

```
In [1]: print("veerkumar.v.a")
import random
number=random.randint(1,10)
guess=0
while guess!=number:
    guess=int(input("guess a number"))
    if guess<number:
        print("guess a higher number")
    elif guess>number:
        print("guess a lower number")
    else:
        print("you guessed the correct number",number)
```

```
veerkumar.v.a
guess a number9
guess a lower number
guess a number6
guess a lower number
guess a number5
guess a lower number
guess a number4
guess a lower number
guess a number3
you guessed the correct number 3
```

In []:

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In []: