In [1]:
```
print(":navaratna reddy:".center(20))
num=int(input("enter a number:"))
if num%2==0:
    print("num is even")
else:
    print("num is odd")
```

```
 :navaratna reddy:
enter a number:5
num is odd
```

In [2]:
```
print(":navaratna reddy:".center(20))
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")
```

```
 :navaratna reddy:
enter an integer:9
num is positive
```

In [3]:
```
print(":navaratna reddy:".center(20))
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")
```

```
 :navaratna reddy:
enter a number:4
the given number is not prime
```

In [6]:
```
print(":navaratna reddy:".center(20))
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")
```

```
 :navaratna reddy:
enter a number:345
num is not a pallindrome
```

In [7]:
```
print(":navaratna reddy:".center(20))
a=int(input("enter a num:"))
b=int(input("enter a num:"))
sum=a+b
print(sum)
```

```
 :navaratna reddy:
enter a num:3
enter a num:5
8
```

In [8]:
```
print(":navaratna reddy:".center(20))
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)
```

```
 :navaratna reddy:
enter the number:7
enter the number:9
sum: 16
```

In [9]:
```
print(":navaratna reddy:".center(20))
num1=8
num2=6
result=max(num1,num2)
print("maximum:",result)
```

```
 :navaratna reddy:
maximum: 8
```

In [11]:
```
print(":navaratna reddy:".center(20))
num1=4
num2=6
result=min(num1,num2)
print("minimum:",result)
```

```
 :navaratna reddy:
minimum: 4
```

In [13]:
```
print(":navaratna reddy:".center(20))
num=int(input("enter the fibonacci sequence length:"))
a=0
b=2
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
```

```
 :navaratna reddy:
enter the fibonacci sequence length:4
the fibonacci series of sequence 4 is;
0 224
```

In [14]:
```
print(":navaratna reddy:".center(20))
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)
```

```
 :navaratna reddy:
enter the number:5
factorial is: 120
```

In [15]:
```
print(":navaratna reddy:".center(20))
num_str="6789"
reversed_str=num_str[::-1]
print("reversed number:",reversed_str)
```

```
 :navaratna reddy:
reversed number: 9876
```

In [16]:
```
print(":navaratna reddy:".center(20))
a=int(input("a="))
b=int(input("b="))
a,b=b,a
print("after swapping:")
print("a:",a)
print("b:",b)
```

```
 :navaratna reddy:
a=7
b=6
after swapping:
a: 6
b: 7
```

In [18]:
```
print(":navaratna reddy:".center(20))
import math
num1=int(input("enter a number:"))
num2=int(input("enter a number:"))
result=math.gcd(num1,num2)
print("result:",result)
```

```
 :navaratna reddy:
enter a number:3
enter a number:6
result: 3
```

In [1]:
```
print(":navaratna reddy:".center(20))
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)
```

```
 :navaratna reddy:
guess a number5
guess a lower number
guess a number3
guess a lower number
guess a number1
guess a higher number
guess a number2
you guessed the correct number 2
```

In [ ]:
```

```