

num.py - G:/Harithaa S/num.py (3.10.7)

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```
a=10
b=5
print(a+b)
print(a-b)
print(a*b)
print(a/b)
```

IDLE Shell 3.10.7

File Edit Shell Debug Options Window Help

Python 3.10.7 (tags/v3.10.7:6cc6b13, Sep 5 2022, 14:08:36) [MSC v.1933 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.

>>>

===== RESTART: G:/Harithaa S/num.py =====

15
5
50
2.0

>>> |

num.py - G:/Harithaa S/num.py (3.10.7)

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```
#if else
n= int(input("Enter n:"))
if n%2==0:
    print("Even")
else:
    print("Odd")
```

IDLE Shell 3.10.7

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>>>

===== RESTART: G:/Harithaa S/num.py =====

Enter n:5

Odd

>>>

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#multiple variable

a=5

print(a)

print(id(a))

a=25

print(a)

print(id(a))

b=a

print(b)

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>>>

===== RESTART: G:/Harithaa S/num.py =====

5

2556838216048

25

2556838216688

25

>>>

|

num.py - G:/Harithaa S/num.py (3,10.7)

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```
a=int(input("Enter the 1st element:"))
b=int(input("Enter the 2nd element:"))
n=int(input("Enter the no of element:"))
print(a,b,end=" ")
```

```
while n-2:
    c=a+b
    a=b
    b=c
    print(c,end=" ")
    n=n-1
```

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>>>

===== RESTART: G:/Harithaa S/num.py =====

Enter the 1st element:1

Enter the 2nd element:2

Enter the no of element:10

1 2 3 5 8 13 21 34 55 89

>>>

num.py - G:/Harithaa S/num.py (3.10.7)

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```
#multiple variable
a,b,c =5,25,50
print(a)
print(b)
print(c)

del(a)
print(a)
```

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```
Python 3.10.7 (tags/v3.10.7:6cc6b13, Sep 5 2022, 14:08:36) [MSC v.1933 64 bit (
AMD64)] on win32
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>>>
----- RESTART: G:/Harithaa S/num.py -----
5
25
50
Traceback (most recent call last):
  File "G:/Harithaa S/num.py", line 8, in <module>
    print(a)
NameError: name 'a' is not defined
>>>
```

num.py - G:/Harithaa S/num.py (3.10.7)

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#Collections

lst=[10,20,30,40,50]

print(lst)

print(type(lst))

#Tuple

tu=(5,10,15,20,25)

print(tu)

print(type(tu))

#Set

s={500,1000,1500,2000,2500.3000}

print(s)

print(type(s))

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>>>

----- RESTART: G:/Harithaa S/num.py -----

[10, 20, 30, 40, 50]

<class 'list'>

(5, 10, 15, 20, 25)

<class 'tuple'>

{2000, 2500.3, 500, 1000, 1500}

<class 'set'>

>>>

num.py - G:/Harithaa S/num.py (3.10.7)

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```
a=2+7j
print(a)
print(type(a))
b=True
print(b)
print(type(b))
```

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>>>

===== RESTART: G:/Harithaa S/num.py =====

```
(2+7j)
<class 'complex'>
True
<class 'bool'>
```

>>>

num.py - G:/Harithaa S/num.py (3.10.7)

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```
str1=input("Enter the letter:")
if(str1 == str1[::-1]):
    print("The letter is a palindrome")
else:
    print("The letter is not a palindrome")
```

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```
>>>
===== RESTART: G:/Harithaa S/num.py =====
Enter the letter:english
The letter is not a palindrome
>>>
===== RESTART: G:/Harithaa S/num.py =====
Enter the letter:malayalam
The letter is a palindrome
>>> |
```


num.py - G:/Harithaa S/num.py (3.10.7)

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```
num=int(input("Enter a number:"))
sum=0
temp=num
while temp>0:
    digit=temp%10
    sum+=digit **3
    temp//=10
if num==sum:
    print(num,"is an armstrong number")
else:
    print(num,"is not an armstrong number")
```

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>>> ===== RESTART: G:/Harithaa S/num.py =====

Enter a number:123
123 is not an armstrong number

>>> ===== RESTART: G:/Harithaa S/num.py =====

Enter a number:151
151 is not an armstrong number

>>> ===== RESTART: G:/Harithaa S/num.py =====

Enter a number:153
153 is an armstrong number

>>> |

num.py - G:/Harithaa S/num.py (3.10.7)

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

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>>>

===== RESTART: G:/Harithaa S/num.py =====

Enter year:2002

not a leap year

>>>

===== RESTART: G:/Harithaa S/num.py =====

Enter year:1999

not a leap year

>>>

===== RESTART: G:/Harithaa S/num.py =====

Enter year:2000

Leap year

>>>

num.py - G:/Harithaa S/num.py (3.10.7)

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#Finding a type of a data variable

a=15.2

print(a)

print(type(a))

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>>>

===== RESTART: G:/Harithaa S/num.py =====

15.2

<class 'float'>

>>>

num.py - G:/Harithaa S/num.py (3.10.7)

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```
def factorial(n):  
    return 1 if (n==1 or n==0) else n * factorial(n - 1)  
num = 5  
print ("Factorial of",num,"is",factorial(num))
```

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>>>

===== RESTART: G:/Harithaa S/num.py =====

Factorial of 5 is 120

>>>

```
while.py - G:/abi/New folder/while.py (3.10.7)
File Edit Format Run Options Window Help
i=0
while i<10:
    print(i)
    i+=1
```

```
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File Edit Shell Debug Options Window Help
Python 3.10.7 (tags/v3.10.7:6cc6b13, Sep 5 2022, 14:08:36) [MSC v.1933 64 bi
t (AMD64)] on win32
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>>>
===== RESTART: G:/abi/New folder/while.py =====
>>>
0
1
2
3
4
5
6
7
8
9
>>>
```