

File Edit Format View Help

EXECUTE THE PROGRAMS DISCUSSED ON DAY 2

File Edit Format Run Options Window Help

```
#while  
i=0  
while i<=10:  
    print(i)  
    i+=1
```

File Edit Shell Debug Options Window Help

Python 3.9.0 (tags/v3.9.0:9cf6752, Oct 5 2020, 15:34:40) [MSC v.1927 64 bit (AMD64)] on win32

Type "help", "copyright", "credits" or "license()" for more information.

>>>

0
1
2
3
4
5
6
7
8
9
10

Ln: 28 Col: 4

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

File Edit Shell Debug Options Window Help

```
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>>>
===== RESTART: F:/IBM project/ifelseloop.py =====
enter a num:5
odd
>>> |
```

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```
a=10
b=20
print(a/b)
print(a-b)
print(a/b)
print(a*b)
```

Python 3.9.0 Shell
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```
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>>>
===== RESTART: F:/IBM project/calculator.py =====
0.5
-10
0.5
200
>>> |
```

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```
#collections
lst = [10,20,30,40,50]
print(lst)
print(type(lst))

#tuple
l=(10,20,30,40,50)
print(l)
print(type(l))

#set
s={100,200,300,400,500}
print(s)
print(type(s))
```

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```
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>>>
===== RESTART: F:/IBM project/collection-tuples.py =====
[10, 20, 30, 40, 50]
<class 'list'>
(10, 20, 30, 40, 50)
<class 'tuple'>
{400, 100, 500, 200, 300}
<class 'set'>
>>> |
```

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```
#finding data type of a variable  
a=20.5  
print(a)  
print(type(a))
```

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```
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>>>  
===== RESTART: F:/IBM project/datatype.py =====  
20.5  
<class 'float'>  
>>> |
```

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

```
b=True
print(b)
print(type(b))
```

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>>>

===== RESTART: F:/IBM project/complex.py =====

(2+7j)

<class 'complex'>

True

<class 'bool'>

>>> |

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```
#multiple variable
```

```
a,b,c =10,3,20
```

```
print(a)
```

```
print(b)
```

```
print(c)
```

```
del(b)
```

```
print(b)
```

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```
>>>
```

```
===== RESTART: F:/IBM project/multiplevariables.py =====
```

```
10
```

```
3
```

```
20
```

```
Traceback (most recent call last):
```

```
  File "F:/IBM project/multiplevariables.py", line 8, in <module>
```

```
    print(b)
```

```
NameError: name 'b' is not defined
```

```
>>> |
```


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```
#variables
a=10
print(a)
print(id(a))
```

```
a=20
print(a)
print(id(a))
b=a
print(b)
```

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>>>

===== RESTART: F:/IBM project/variables.py =====

10

2854387149392

20

2854387149712

20

>>> |

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PRACTICE PYTHON IN IDLE|

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```
def fact(num):  
    if num==0:  
        return num  
    else:  
        return num*fact(num-1)  
print(fact(5))
```

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>>>

===== RESTART: F:/IBM project/factorial.py =====

0

>>> 120

120

>>>

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```
a=int(input('enter the first element'))
b=int(input('enter the second element'))
n=int(input('enter the number 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: F:/IBM project/fibonacci.py =====

enter the first element1

enter the second element1

enter the number of element5

1 1 2 3 5

>>> |

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```
year=int(input('enter year'))
if year % 400==0:
    print('it is a leap year')
elif year % 4==0:
    print('it is a leap year')
elif year % 100==0:
    print('not a leap year')
else:
    print('not a leap year')
```

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>>>

===== RESTART: F:/IBM project/leap year.py =====

enter year2022

not a leap year

>>> |

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

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>>>

===== RESTART: F:/IBM project/palindrome.py =====

enter the letter:malayalam

the letter is a palindrome

>>> |

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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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```
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>>>
===== RESTART: F:/IBM project/armstrong.py =====
enter a number:369
369 is not an armstrong number
>>>
===== RESTART: F:/IBM project/armstrong.py =====
enter a number:407
407 is an armstrong number
>>> |
```