

EXECUTE THE PROGRAMS DISCUSSED ON DAY 2

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

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: C:\Users\elcot\Desktop\day 2\prog1.py =====

==

0
1
2
3
4
5
6
7
8
9
10

>>>

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

Python 3.10.7 (tags/v3.10.7:6cc6b13, Sep 5 2022, 14:08:36) [MSC v.193
3 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more informatio
n.

>>>

===== RESTART: C:\Users\elcot\Desktop\day 2\prog2.py =====
=====

enter a num:55

odd

>>>

|

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

```
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: C:\Users\elcot\Desktop\day 2\prog5.py =====  
==  
20.5  
<class 'float'>  
>>>
```

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

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

IDLE Shell 3.10.7

File Edit Shell Debug Options Window Help

```
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>>>
===== RESTART: C:\Users\elcot\Desktop\day 2\prog6.py =====
>>>
(2+7j)
<class 'complex'>
True
<class 'bool'>
>>>
```

#multiple variable

a,b,c =10,3,20

print(a)

print(b)

print(c)

del(b)

print(b)

IDLE Shell 3.10.7

File Edit Shell Debug Options Window Help

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>>>

===== RESTART: C:\Users\elcot\Desktop\day 2\prog7.py =====

==

10

3

20

Traceback (most recent call last):

File "C:\Users\elcot\Desktop\day 2\prog7.py", line 8, in <module>

print(b)

NameError: name 'b' is not defined

>>>

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

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

IDLE Shell 3.10.7

File Edit Shell Debug Options Window Help

```
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>>>
===== RESTART: C:\Users\elcot\Desktop\day 2\prog6.py =====
>>>
(2+7j)
<class 'complex'>
True
<class 'bool'>
>>>
```

```
#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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>>>

===== RESTART: C:\Users\elcot\Desktop\day 2\prog4.

py =====

[10, 20, 30, 40, 50]

<class 'list'>

(10, 20, 30, 40, 50)

<class 'tuple'>

{400, 100, 500, 200, 300}

<class 'set'>

>>>


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

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: C:\Users\elcot\Desktop\day 2\prog3.py ==
=====

0.5

-10

0.5

200

>>>

|

PRACTICE PYTHON IN IDLE

```
# Python program to display all the prime numbers within an interval
# change the values of lower and upper for a different result
```

```
lower = 1
upper = 50
```

```
# uncomment the following lines to take input from the user
#lower = int(input("Enter lower range: "))
#upper = int(input("Enter upper range: "))
```

```
print("Prime numbers between", lower, "and", upper, "are:")
```

```
for num in range(lower, upper + 1):
    # prime numbers are greater than 1
```

```
    if num > 1:
        for i in range(2, num):

            if (num % i) == 0:
                break
```

```
    else:
        print(num)
```

```
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```

>>>

```
===== RESTART: C:\Users\elcot\Desktop\day 2\primenumber.py =====
```

```
Prime numbers between 1 and 50 are:
```

```
2
```

```
3
```

```
5
```

```
7
```

```
11
```

```
13
```

```
17
```

```
19
```

```
23
```

```
29
```

```
31
```

```
37
```

```
41
```

```
43
```

```
47
```

>>>

Using while loop

num = 14

To take input from the user

num = int(input("Display multiplication table of? "))

count = 1

while count < 11:

print(num, ' x ', count, ' = ', num * count)

count = count + 1

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>>>

===== RESTART: C:\Users\elcot\Desktop\day 2\multiplicationtable.py =====

14 x 1 = 14

14 x 2 = 28

14 x 3 = 42

14 x 4 = 56

14 x 5 = 70

14 x 6 = 84

14 x 7 = 98

14 x 8 = 112

14 x 9 = 126

14 x 10 = 140

>>>

```
def convertToBinary(n):  
    # Function to print binary number for the input decimal using recursion  
    if n > 1:  
        convertToBinary(n//2)  
    print(n % 2,end = '')  
  
# decimal number  
dec = 175  
  
convertToBinary(dec)  
print()
```

```
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>>>  
===== RESTART: C:\Users\elcot\Desktop\day 2\dectobin.py =====  
=  
10101111  
>>> |
```

```
# string of vowels
vowels = 'aeiou'

# change this value for a different result
ip_str = 'Hello, have you tried our tutorial section yet?'

# uncomment to take input from the user
#ip_str = input("Enter a string: ")

# make it suitable for caseless comparisons
ip_str = ip_str.casefold()

# make a dictionary with each vowel a key and value 0
count = {}.fromkeys(vowels, 0)

# count the vowels
for char in ip_str:
    if char in count:
        count[char] += 1

print(count)
```

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```
>>>
===== RESTART: C:\Users\elcot\Desktop\day 2\countvowels.py =====
>>>
{'a': 2, 'e': 5, 'i': 3, 'o': 5, 'u': 3}
>>>
```

```
# import module
import calendar

yy = 2022
mm = 10

# To ask month and year from the user
# yy = int(input("Enter year: "))
# mm = int(input("Enter month: "))

# display the calendar
print(calendar.month(yy, mm))
```

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>>>

===== RESTART: C:\Users\elcot\Desktop\day 2\calender.py =====

October 2022
Mo Tu We Th Fr Sa Su
1 2
3 4 5 6 7 8 9
10 11 12 13 14 15 16
17 18 19 20 21 22 23
24 25 26 27 28 29 30
31

>>> |