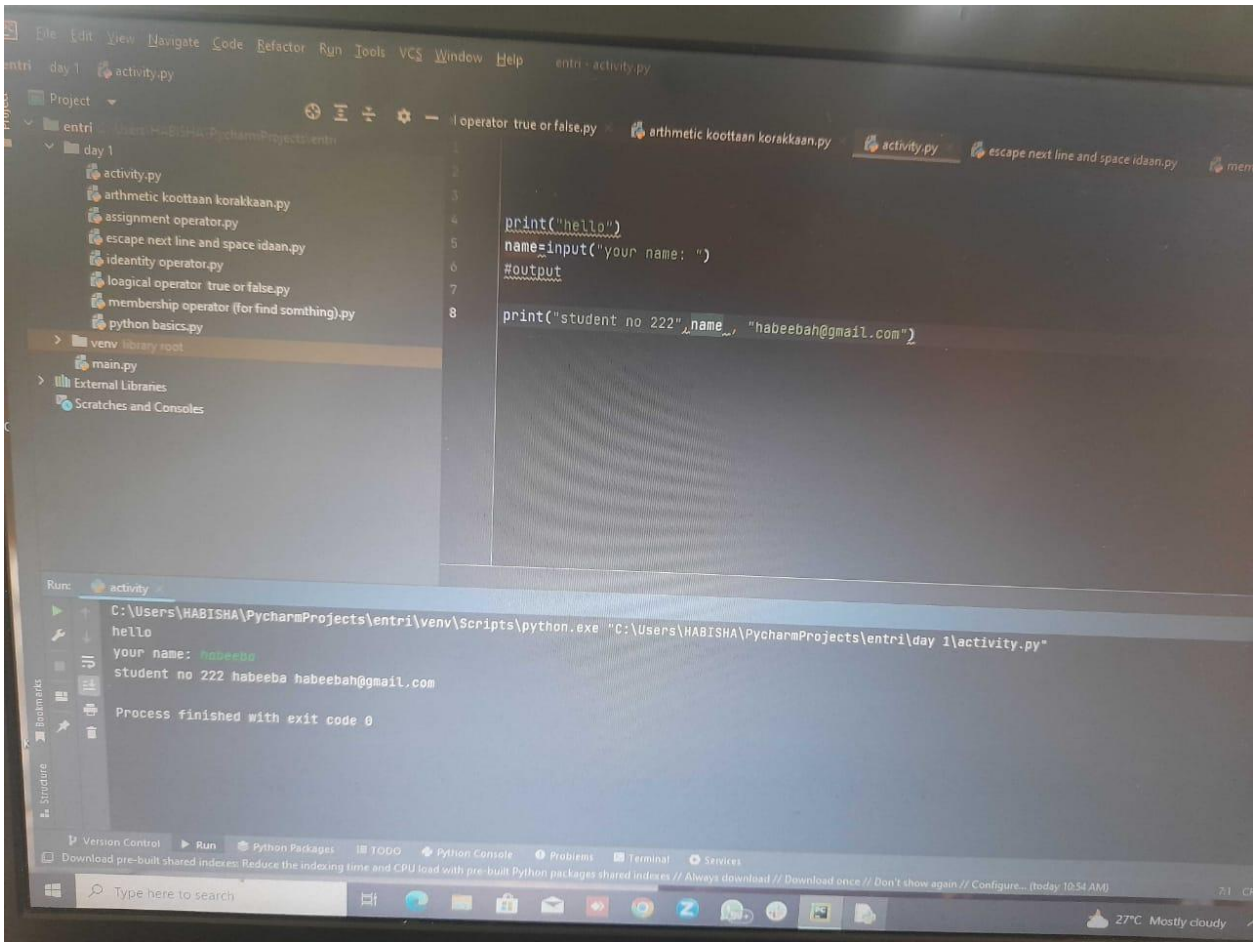
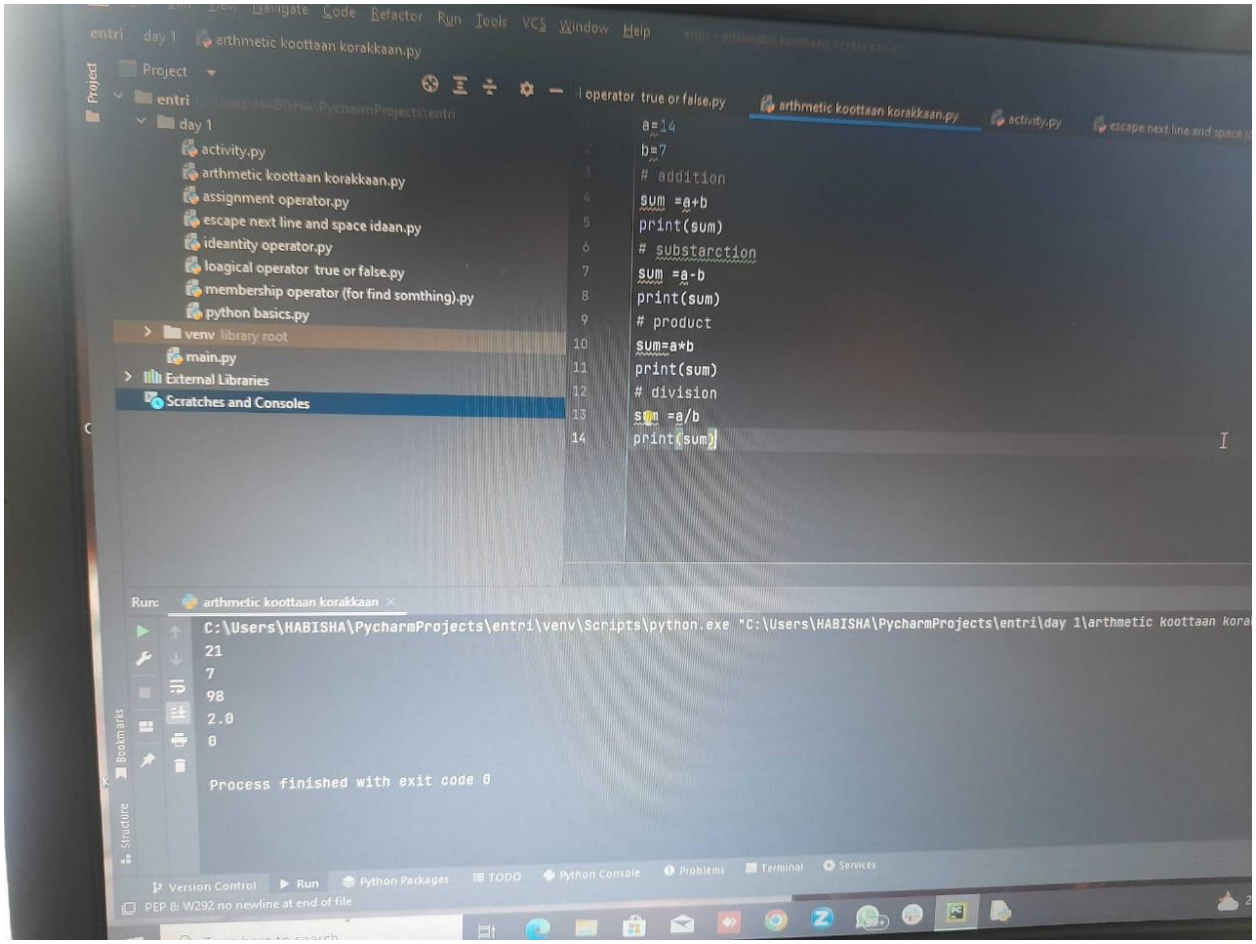
Tasks - 09/09/2023

Task 2:
Write Python code that prints your name, student number and email address using input and output functions

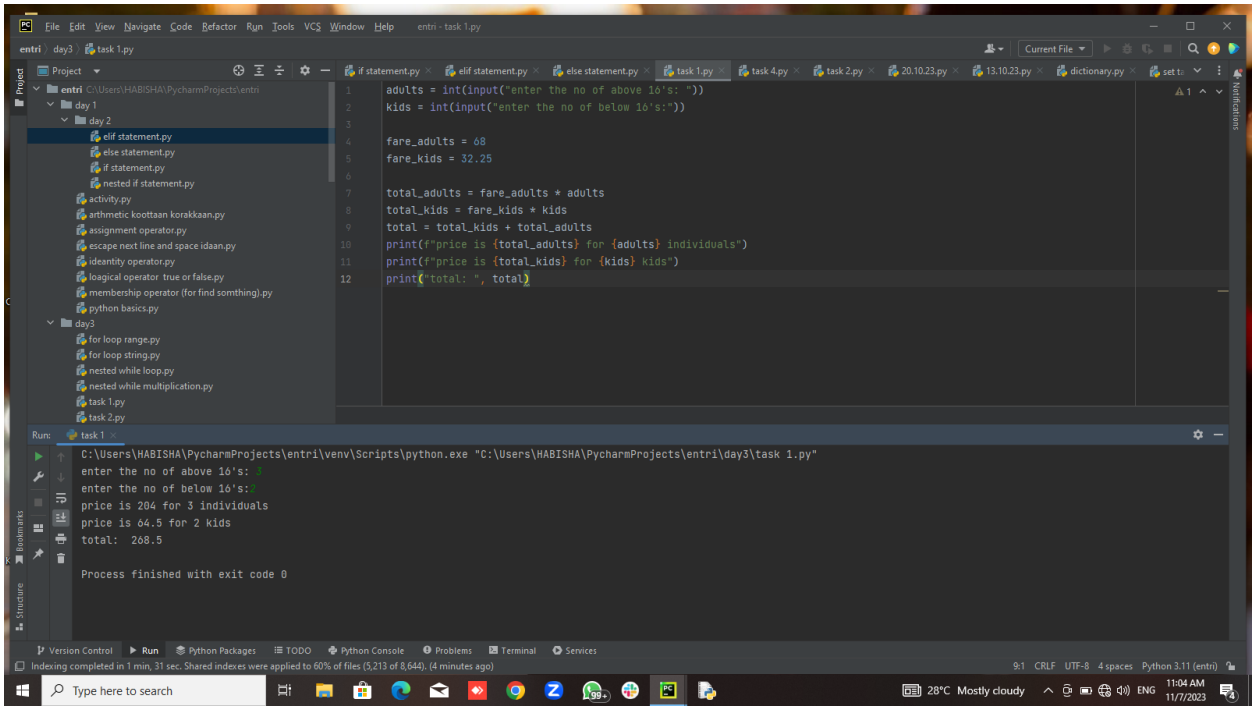


Task 3:
Write Python code that add, subtract, multiply and divide the two numbers. You can use the two numbers 14 and 7.

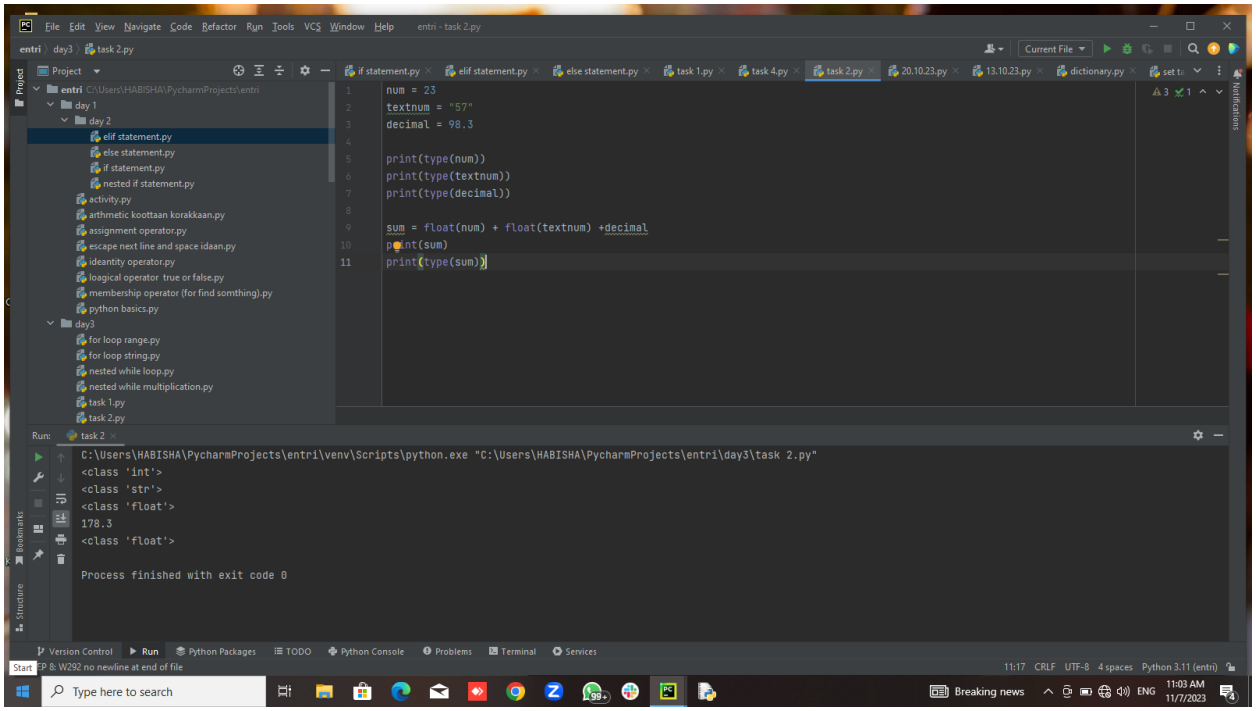


Tasks - 19/09/2023

1) A three-day festival is the official celebration.
There are two categories of tickets: individual cost is £68, under sixteen is £32.25. Write a program thatasks the user for total numbers in each category, calculate and display the breakdown of each and totalprices.
To get more idea please see the execution of the program below:
Doctor Who Festival - Price Calculator
Note: enter 0 if none
Enter total number of individuals : 3
Enter total number of under 16s: 2
Category Price Breakdown:
Price is £204 for 3 individuals
Price is £64.5 for 2 under 16s

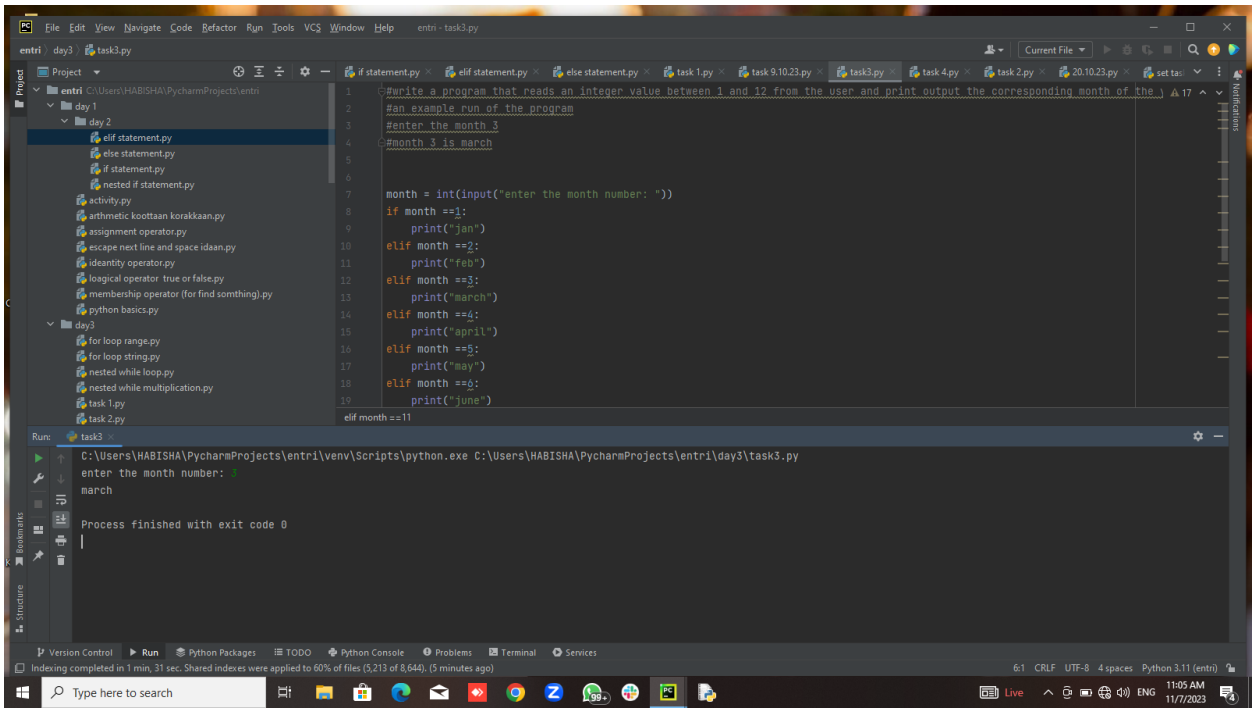


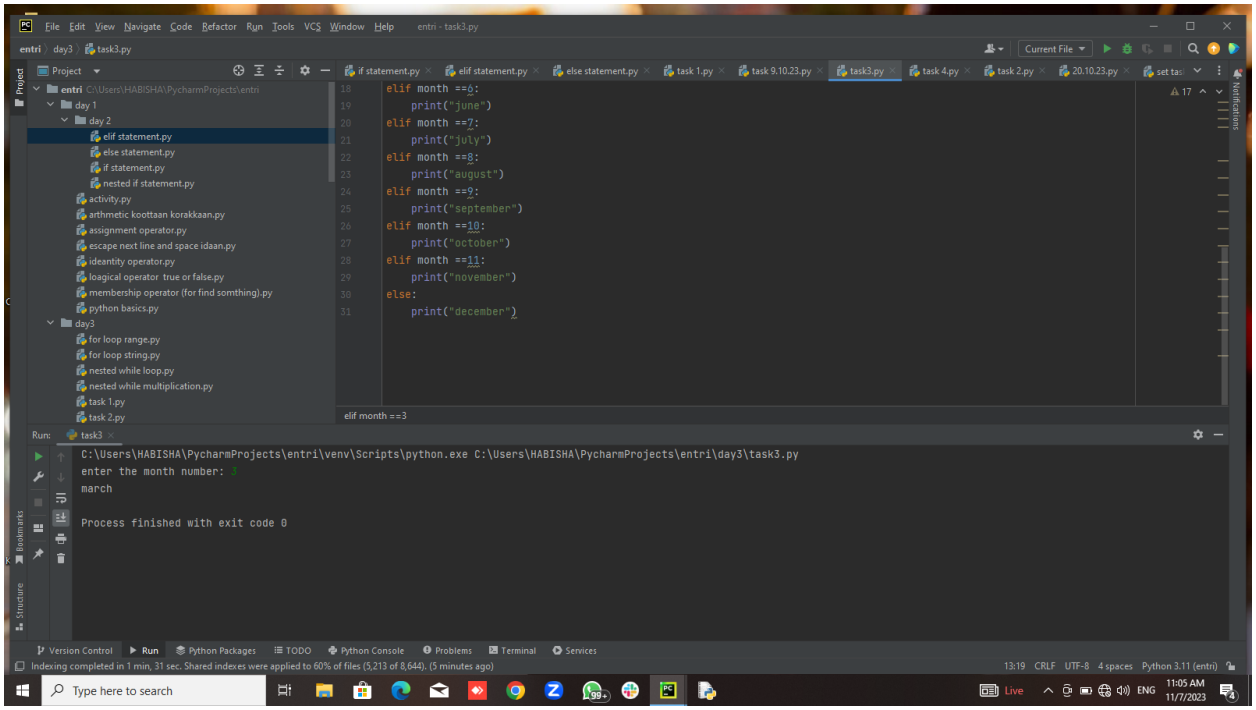
2) Define the variables below. Print the types of each variable. What is the sum of your variables? (Hint:use a type conversion function.) What datatype is the sum?
num=23
textnum="57"
decimal=98.3



3) Name your file: MonthNames.py
Write a program that reads an integer value between 1 and 12 from the user and prints output the corresponding month of the year.
An example run of the program
Enter the month: 3
Month 3 is March

Name your file: EvenOddNumbers.py



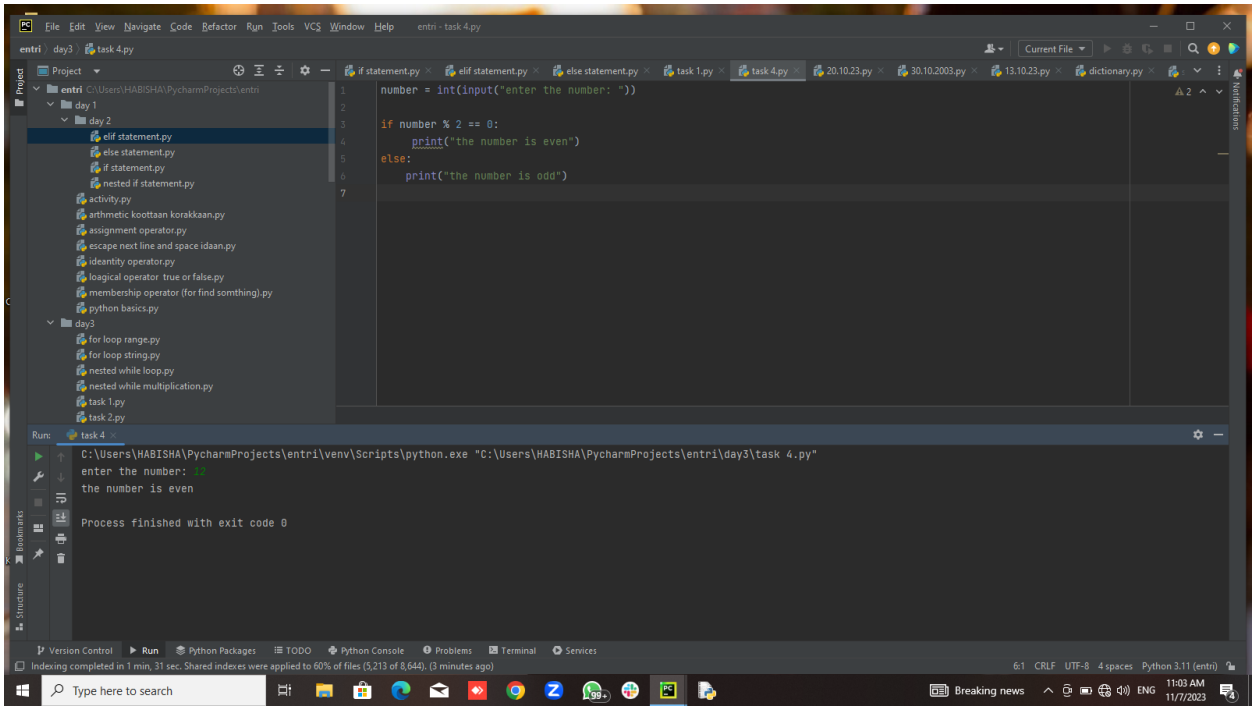


4) Write a program that reads an integer value from the user and prints output whether it is odd or even.

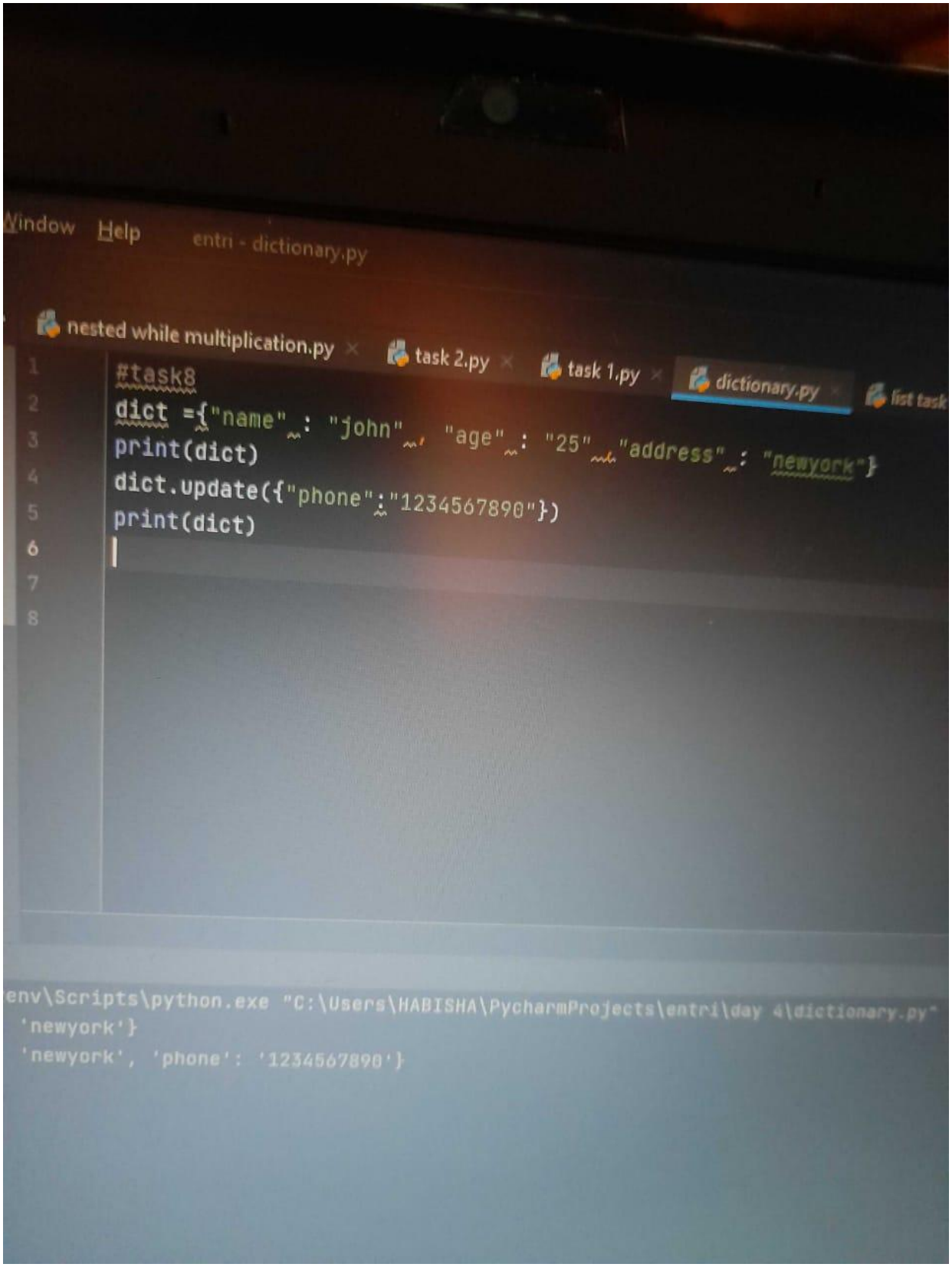
An example run of the program (use modulus (%) operator)

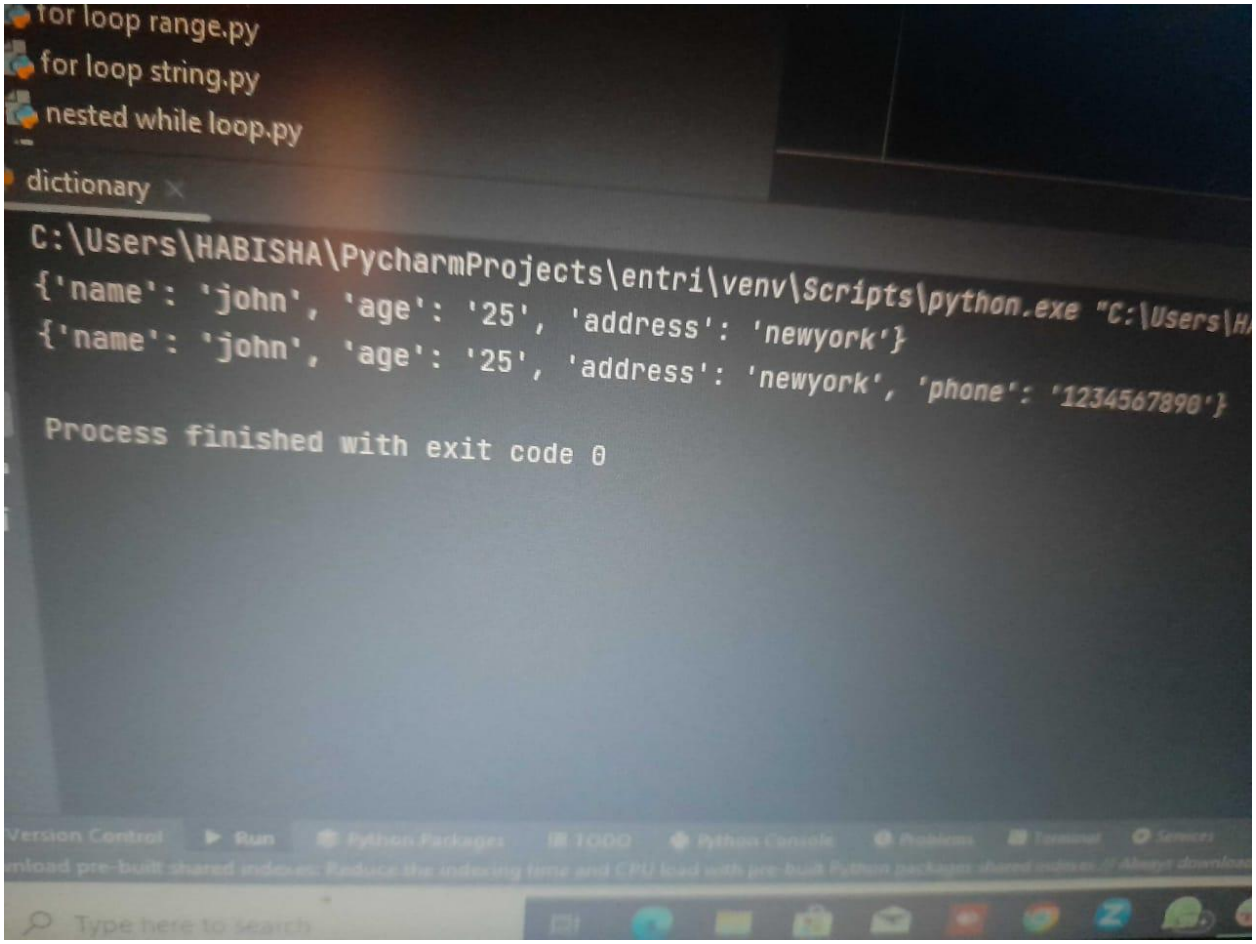
Enter a number: 12

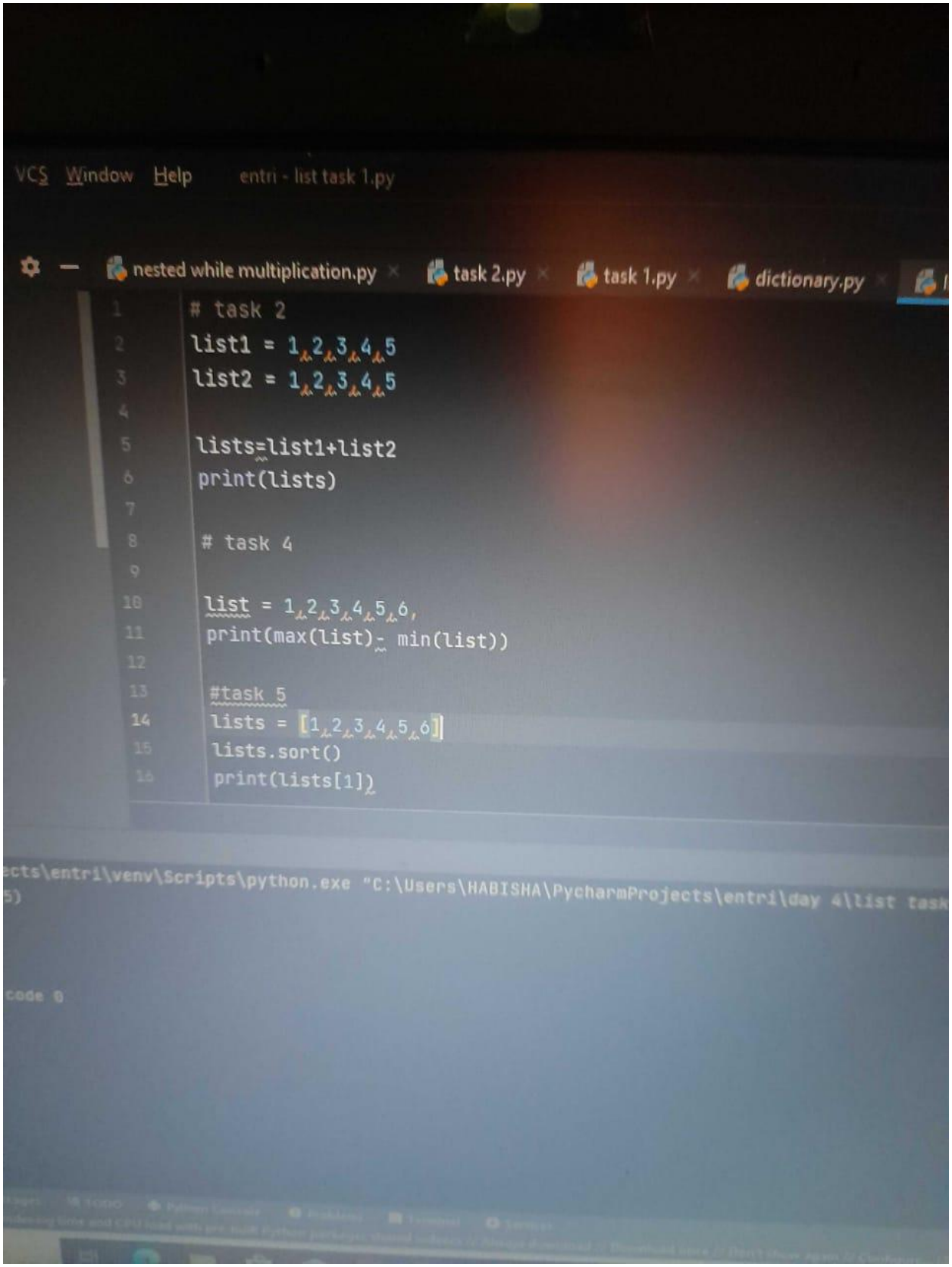
12 is “even”

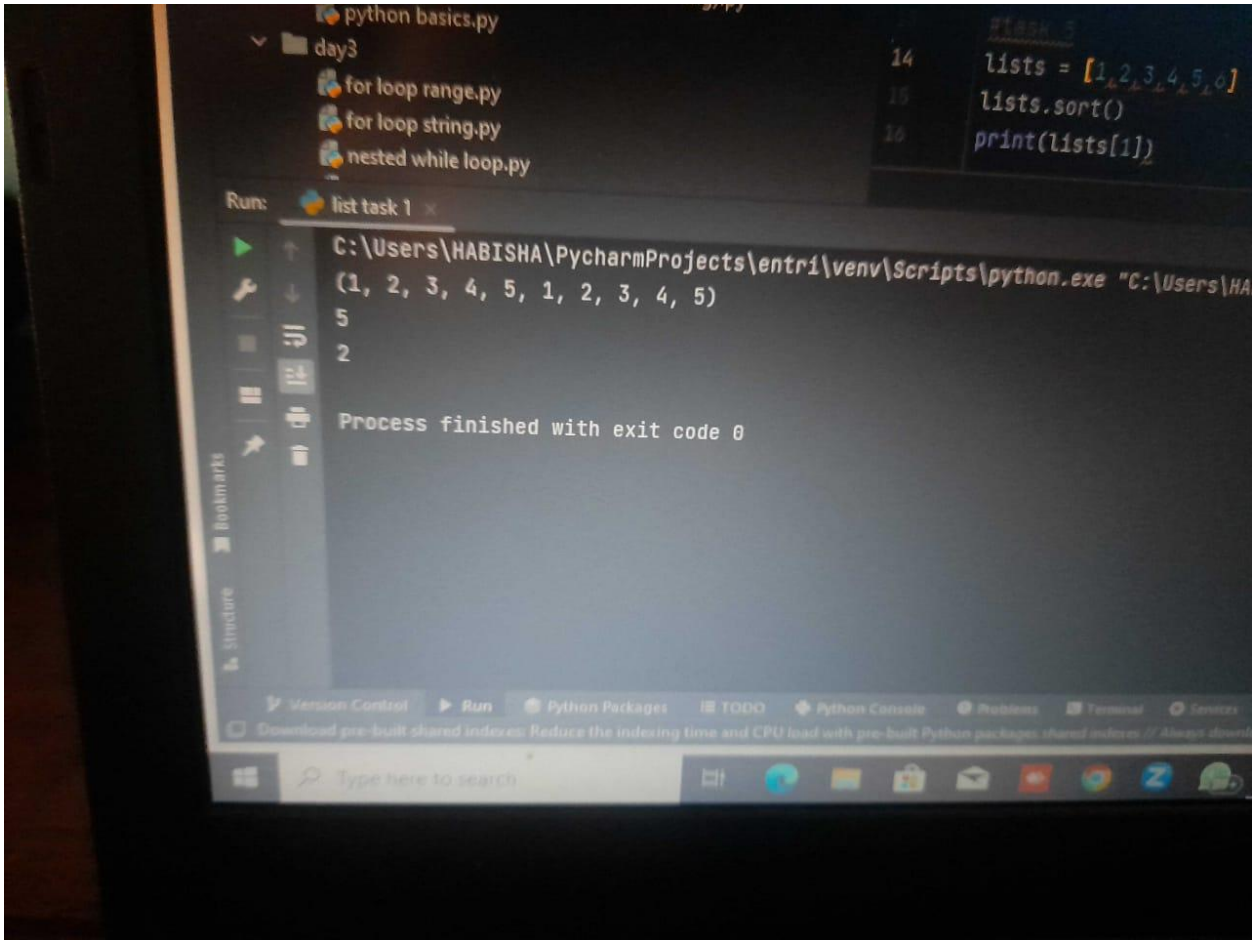

number = int(input("enter the number: "))
if number % 2 == 0:
print("the number is even")
else:
print("the number is odd")
C:\Users\HABISHA\PycharmProjects\entri\venv\Scripts\python.exe "C:\Users\HABISHA\PycharmProjects\entri\day3\task 4.py"
enter the number: 12
the number is even
Process finished with exit code 0

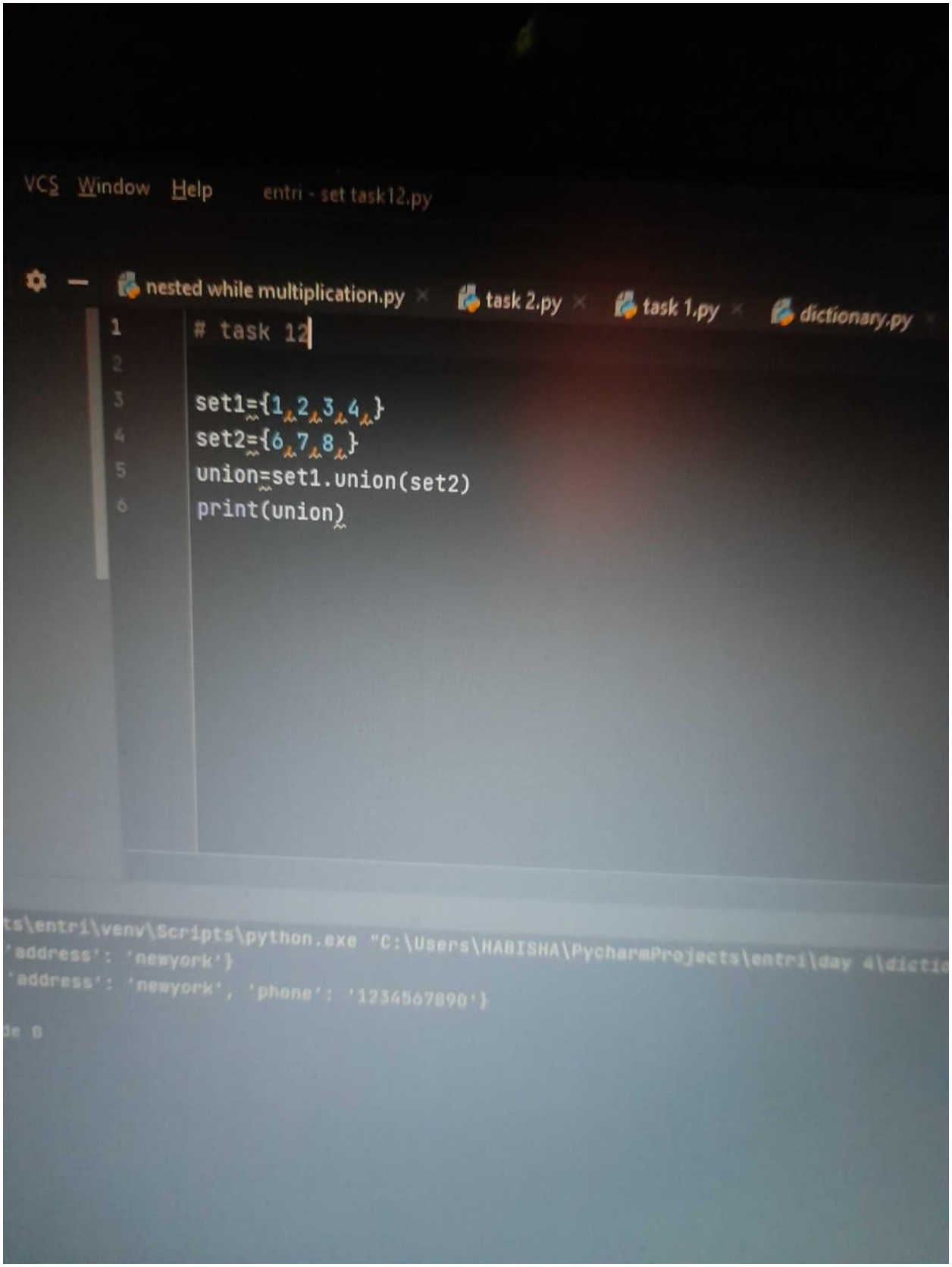
[23.9.2023]

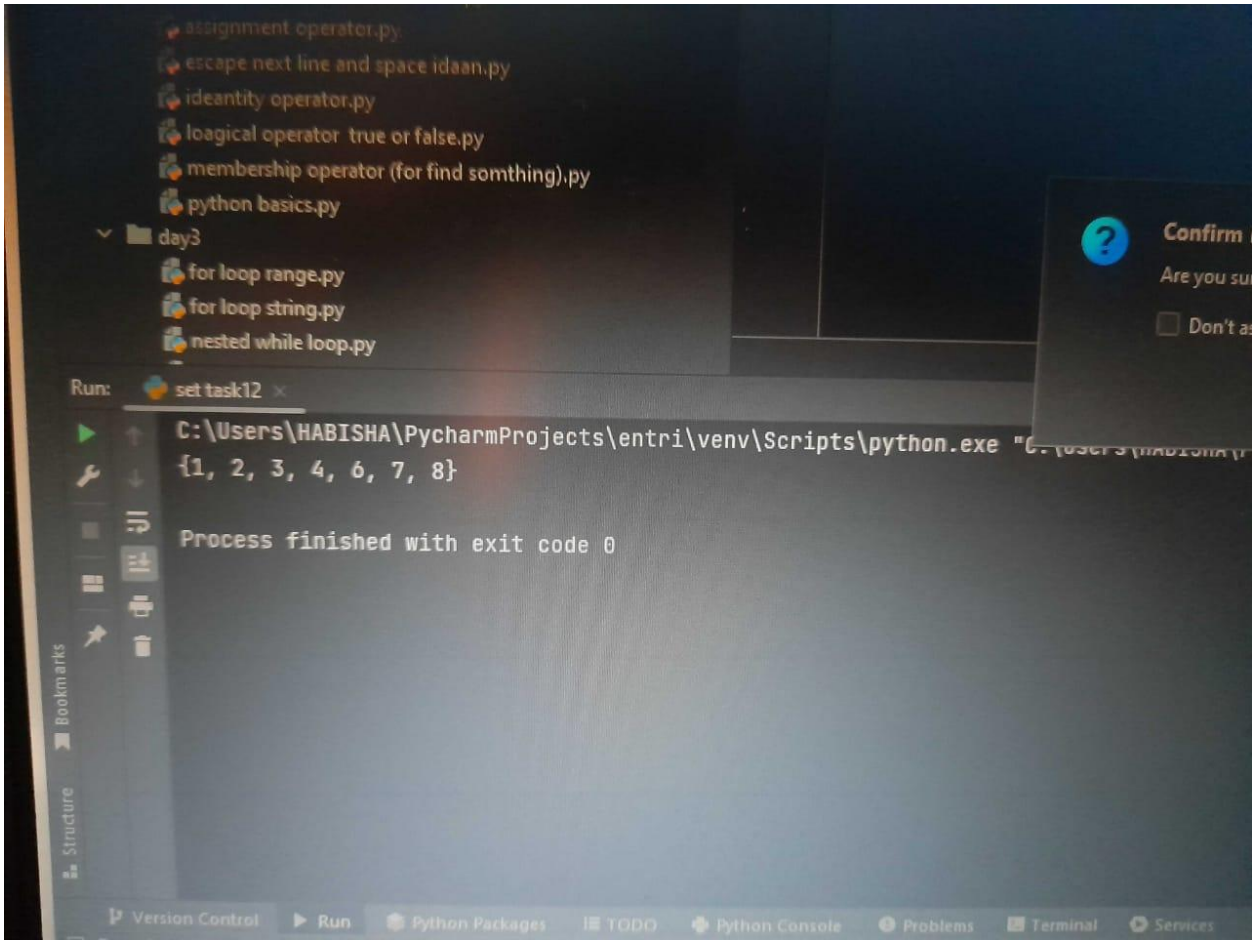

Window Help
entri - dictionary.py
nested while multiplication.py
task 2.py
task 1.py
dictionary.py
list task
#task8
dict ={"name": "john", "age": "25","address": "newyork"}
print(dict)
dict.update({"phone":"1234567890"})
print(dict)
env\Scripts\python.exe "C:\Users\HABISHA\PycharmProjects\entri\day 4\dictionary.py"
'newyork'}
'newyork', 'phone': '1234567890'}


for loop range.py
for loop string.py
nested while loop.py
dictionary
C:\Users\HABISHA\PycharmProjects\entri\venv\Scripts\python.exe "C:\Users\HA
{'name': 'john', 'age': '25', 'address': 'newyork'}
{'name': 'john', 'age': '25', 'address': 'newyork', 'phone': '1234567890'}
Process finished with exit code 0
Version Control
Run
Python Packages
TODO
Python Console
Problems
Terminal
Services
Type here to search

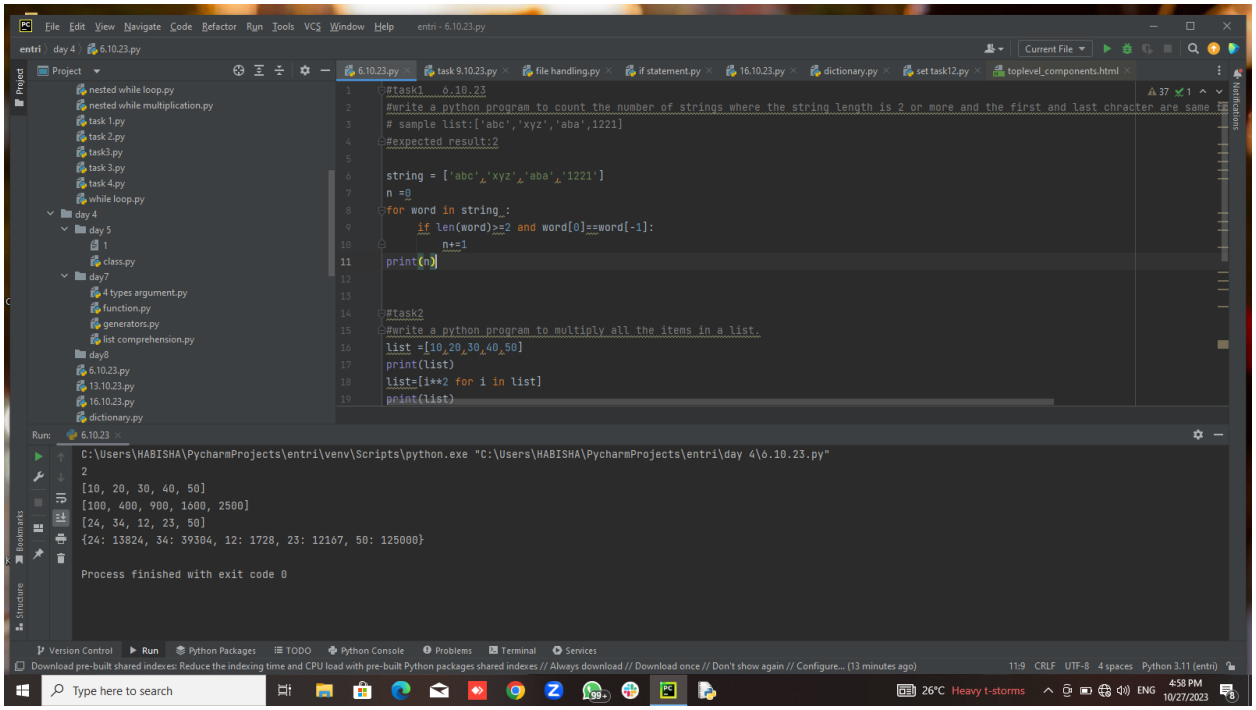

VCS Window Help entri - list task 1.py
nested while multiplication.py
task 2.py
task 1.py
dictionary.py
# task 2
list1 = 1,2,3,4,5
list2 = 1,2,3,4,5
lists=list1+list2
print(lists)
# task 4
list = 1,2,3,4,5,6,
print(max(list)- min(list))
#task 5
lists = [1,2,3,4,5,6]
lists.sort()
print(lists[1])
ects\entri\venv\Scripts\python.exe "C:\Users\HABISHA\PycharmProjects\entri\day 4\list task
5)
code 0

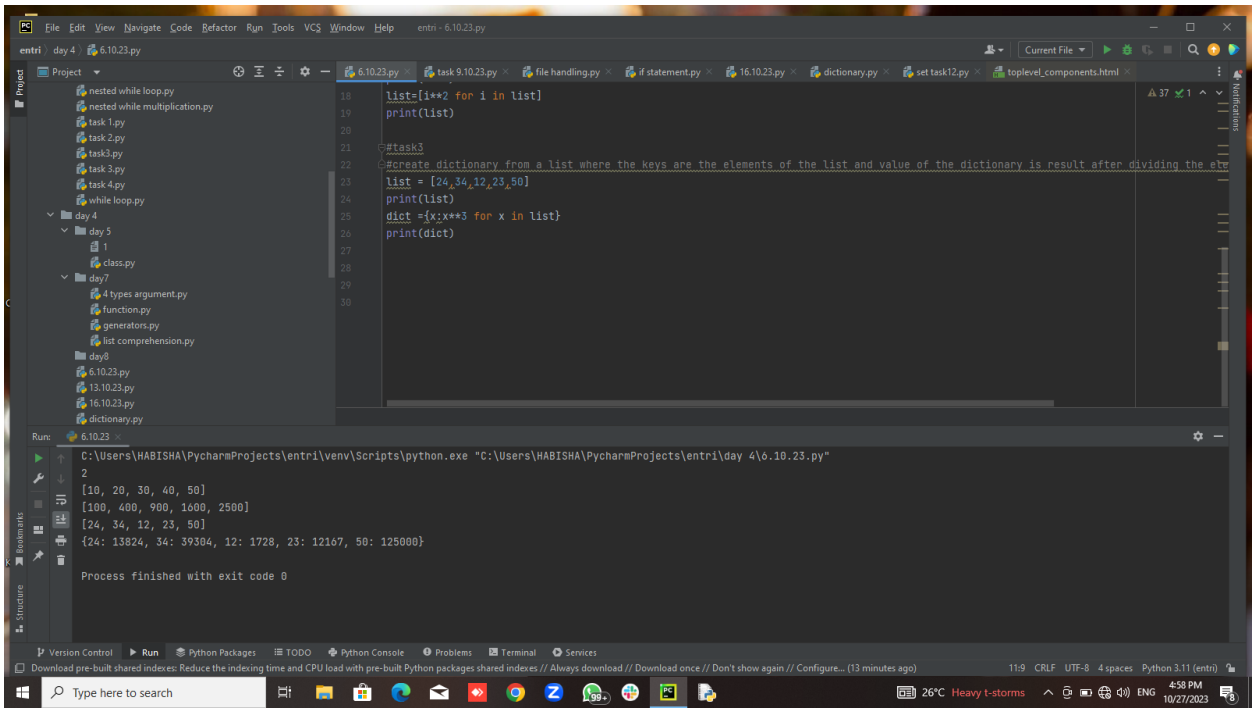

python basics.py
day3
for loop range.py
for loop string.py
nested while loop.py
lists = [1,2,3,4,5,1]
lists.sort()
print(lists[1])
Run:
list task 1
C:\Users\HABISHA\PycharmProjects\entri\venv\Scripts\python.exe "C:\Users\HA
(1, 2, 3, 4, 5, 1, 2, 3, 4, 5)
5
2
Process finished with exit code 0
Bookmarks
Structure
Version Control
Run
Python Packages
TODO
Python Console
Problems
Terminal
Type here to search


VCS Window Help
entri - set task12.py
nested while multiplication.py
task 2.py
task 1.py
dictionary.py
# task 12
set1={1,2,3,4,}
set2={6,7,8,}
union=set1.union(set2)
print(union)
ts\entri\venv\Scripts\python.exe "C:\Users\HABISHA\PycharmProjects\entri\day 4\dictio
'address': 'newyork'}
'address': 'newyork', 'phone': '1234567890'}

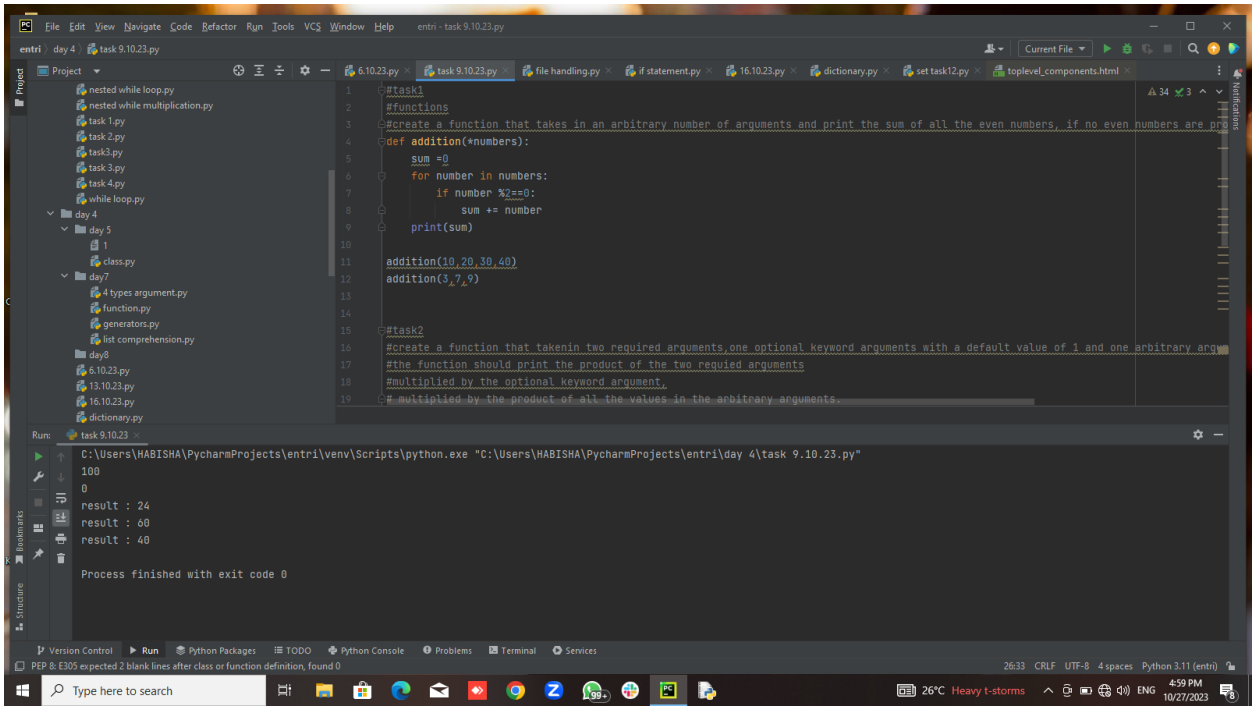

assignment operator.py
escape next line and space idaan.py
ideantity operator.py
loagical operator true or false.py
membership operator (for find somthing).py
python basics.py
day3
for loop range.py
for loop string.py
nested while loop.py
Confirm
Are you su
Don't a
Run:
set task12
C:\Users\HABISHA\PycharmProjects\entri\venv\Scripts\python.exe "
{1, 2, 3, 4, 6, 7, 8}
Process finished with exit code 0
Bookmarks
Structure
Version Control
Run
Python Packages
TODO
Python Console
Problems
Terminal
Services

[6.10.2023]


#task1 6.10.23
#write a python program to count the number of strings where the string length is 2 or more and the first and last chracter are same from a given list of strings.
sample list:['abc','xyz','aba',1221]
#expected result:2
string = ['abc','xyz','aba','1221']
n =0
for word in string:
if len(word)>=2 and word[0]==word[-1]:
n+=1
print(n)
#task2
#write a python program to multiply all the items in a list.
list =[10,20,30,40,50]
print(list)
list=[i**2 for i in list]
print(list)
C:\Users\HABISHA\PycharmProjects\entri\venv\Scripts\python.exe "C:\Users\HABISHA\PycharmProjects\entri\day 4\6.10.23.py"
2
[10, 20, 30, 40, 50]
[100, 400, 900, 1600, 2500]
[24, 34, 12, 23, 50]
{24: 13824, 34: 39304, 12: 1728, 23: 12167, 50: 125000}
Process finished with exit code 0

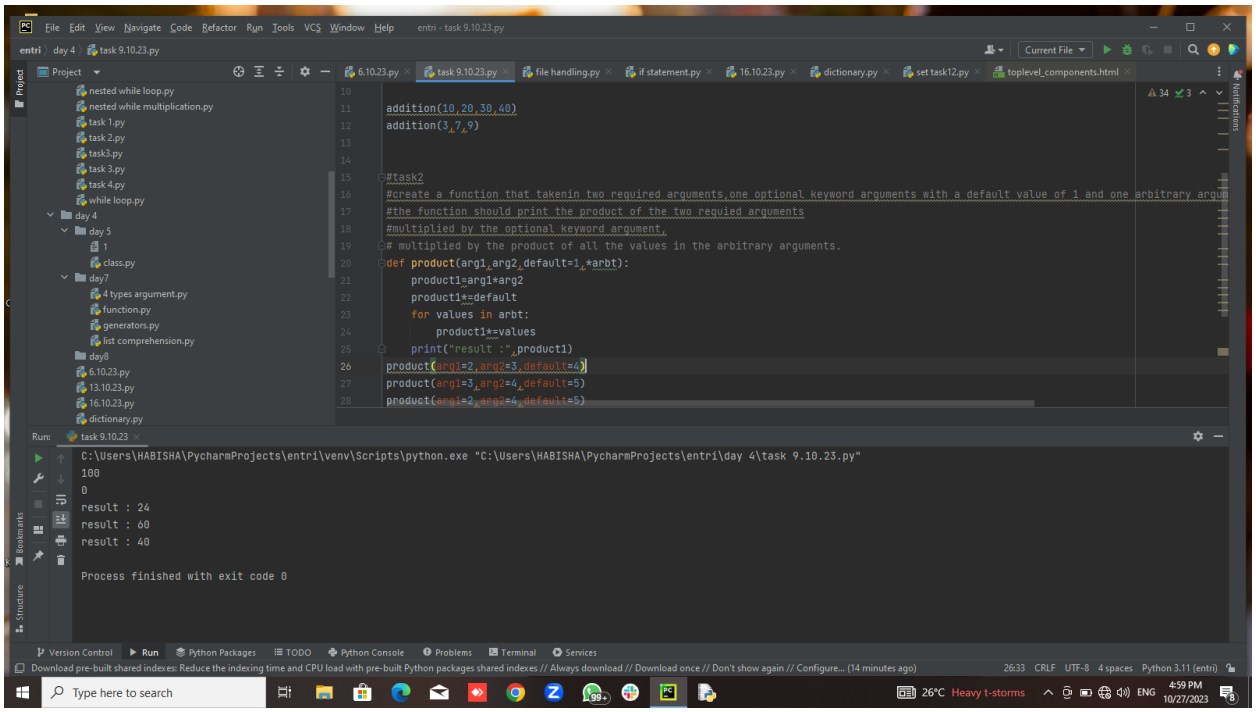

list=[i**2 for i in list]
print(list)
#task3
#create dictionary from a list where the keys are the elements of the list and value of the dictionary is result after dividing the elements by 3
list = [24,34,12,23,50]
print(list)
dict ={x:x**3 for x in list}
print(dict)
C:\Users\HABISHA\PycharmProjects\entri\venv\Scripts\python.exe "C:\Users\HABISHA\PycharmProjects\entri\day 4\6.10.23.py"
2
[10, 20, 30, 40, 50]
[100, 400, 900, 1600, 2500]
[24, 34, 12, 23, 50]
{24: 13824, 34: 39304, 12: 1728, 23: 12167, 50: 125000}
Process finished with exit code 0

[9.10.23]



```
#task1
#functions
#create a function that takes in an arbitrary number of arguments and print the sum of all the even numbers, if no even numbers are pri
def addition(*numbers):
    sum =0
    for number in numbers:
        if number %2==0:
            sum += number
    print(sum)

addition(10,20,30,40)
addition(3,7,9)


#task2
#create a function that takenin two required arguments,one optional keyword arguments with a default value of 1 and one arbitrary argu
#the function should print the product of the two requied arguments
#multiplied by the optional keyword argument,
# multiplied by the product of all the values in the arbitrary arguments.
```

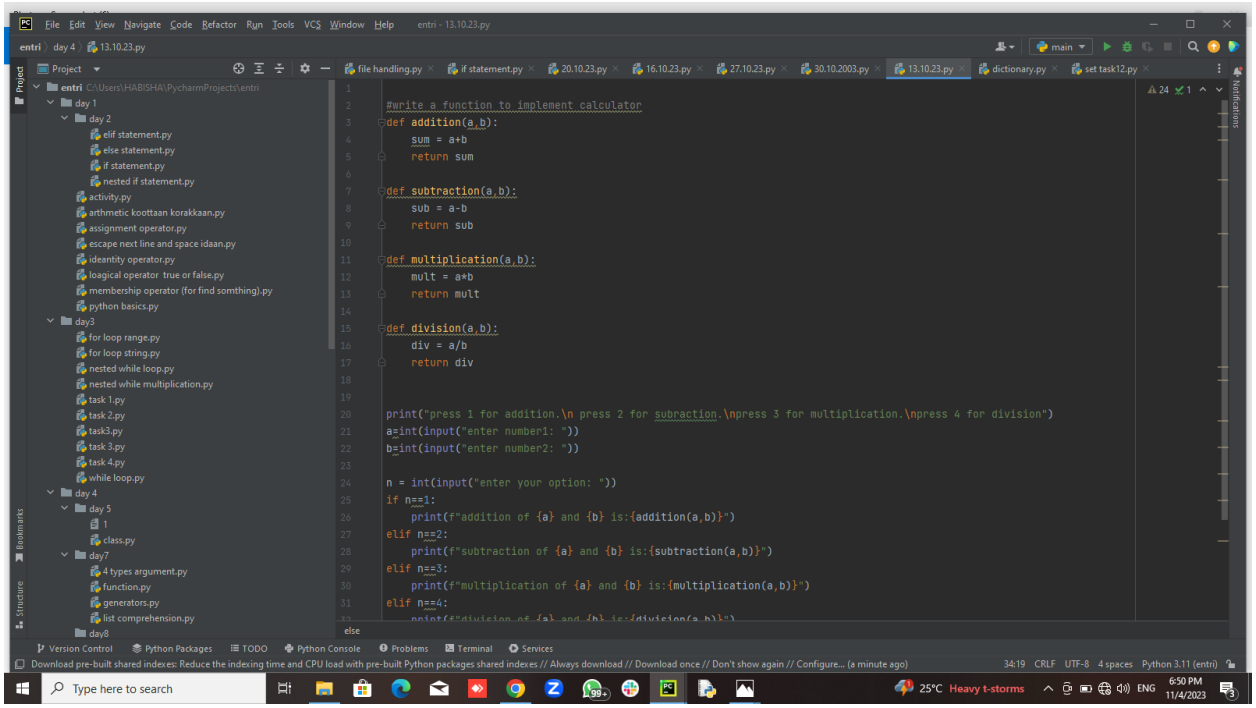
```
C:\Users\HABISHA\PycharmProjects\entri\venv\Scripts\python.exe "C:\Users\HABISHA\PycharmProjects\entri\day 4\task 9.10.23.py"
100
0
result : 24
result : 60
result : 40

Process finished with exit code 0
```



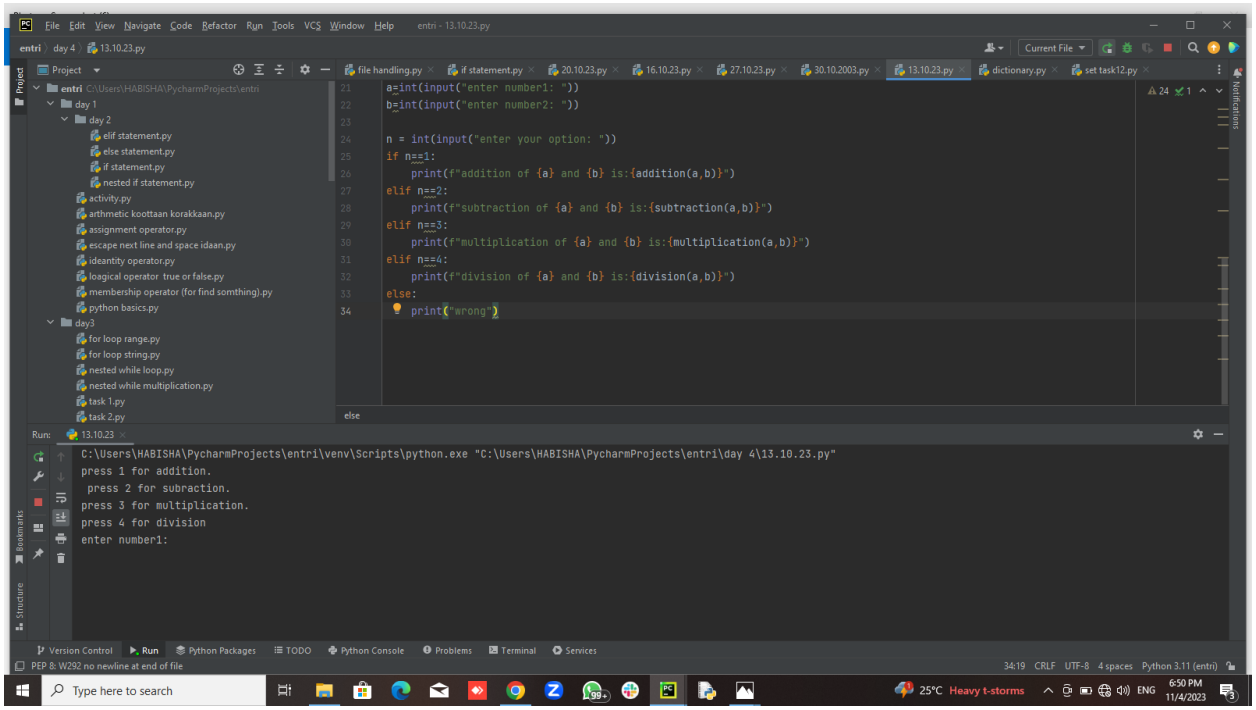
```
addition(10,20,30,40)
addition(3,7,9)


#task2
#create a function that takenin two required arguments,one optional keyword arguments with a default value of 1 and one arbitrary argu
#the function should print the product of the two requied arguments
#multiplied by the optional keyword argument,
# multiplied by the product of all the values in the arbitrary arguments.
def product(arg1,arg2,default=1,*arbt):
    product1=arg1*arg2
    product1*=default
    for values in arbt:
        product1*=values
    print("result :",product1)
product(arg1=2,arg2=3,default=4)
product(arg1=3,arg2=4,default=5)
product(arg1=2,arg2=4,default=5)
```

```
C:\Users\HABISHA\PycharmProjects\entri\venv\Scripts\python.exe "C:\Users\HABISHA\PycharmProjects\entri\day 4\task 9.10.23.py"
100
0
result : 24
result : 60
result : 40

Process finished with exit code 0
```

[13.10.23]



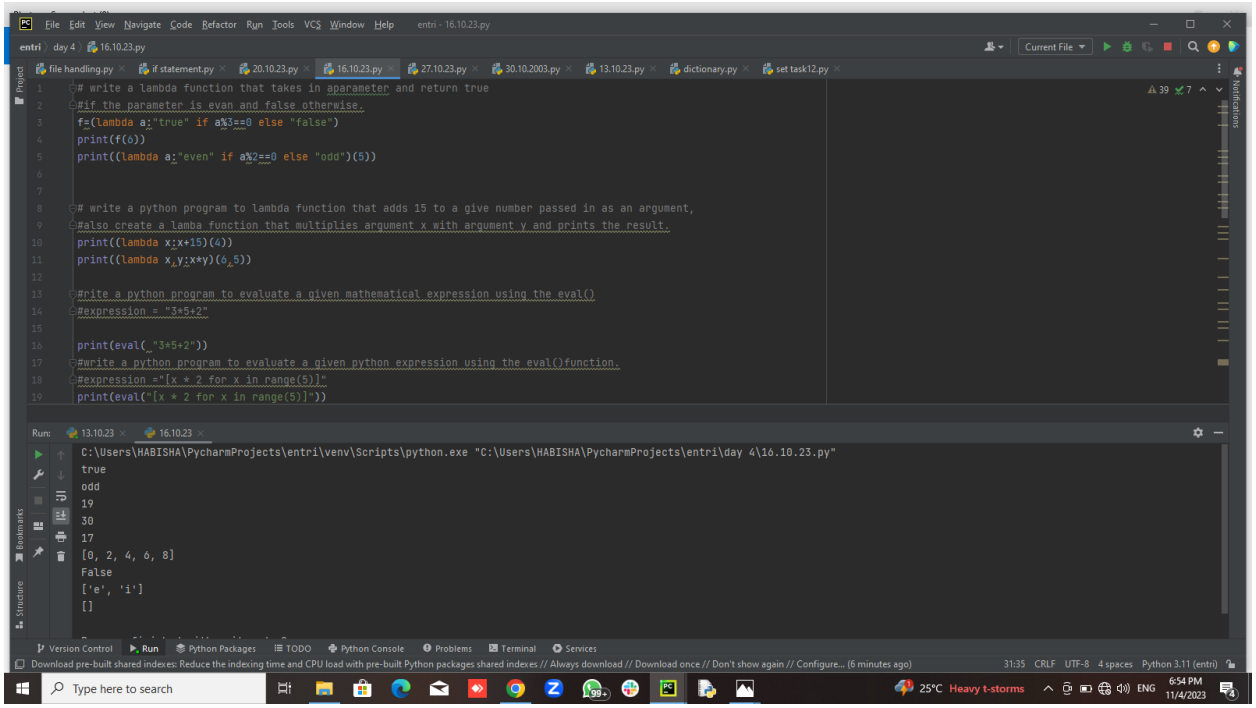
```python
#write a function to implement calculator
def addition(a,b):
    sum = a+b
    return sum

def subtraction(a,b):
    sub = a-b
    return sub

def multiplication(a,b):
    mult = a*b
    return mult

def division(a,b):
    div = a/b
    return div


print("press 1 for addition.\n press 2 for subraction.\npress 3 for multiplication.\npress 4 for division")
a=int(input("enter number1: "))
b=int(input("enter number2: "))

n = int(input("enter your option: "))
if n==1:
    print(f"addition of {a} and {b} is:{addition(a,b)}")
elif n==2:
    print(f"subtraction of {a} and {b} is:{subtraction(a,b)}")
elif n==3:
    print(f"multiplication of {a} and {b} is:{multiplication(a,b)}")
elif n==4:
    print(f"division of {a} and {b} is:{division(a,b)}")
else
```



```python
a=int(input("enter number1: "))
b=int(input("enter number2: "))

n = int(input("enter your option: "))
if n==1:
    print(f"addition of {a} and {b} is:{addition(a,b)}")
elif n==2:
    print(f"subtraction of {a} and {b} is:{subtraction(a,b)}")
elif n==3:
    print(f"multiplication of {a} and {b} is:{multiplication(a,b)}")
elif n==4:
    print(f"division of {a} and {b} is:{division(a,b)}")
else:
    print("wrong")
```

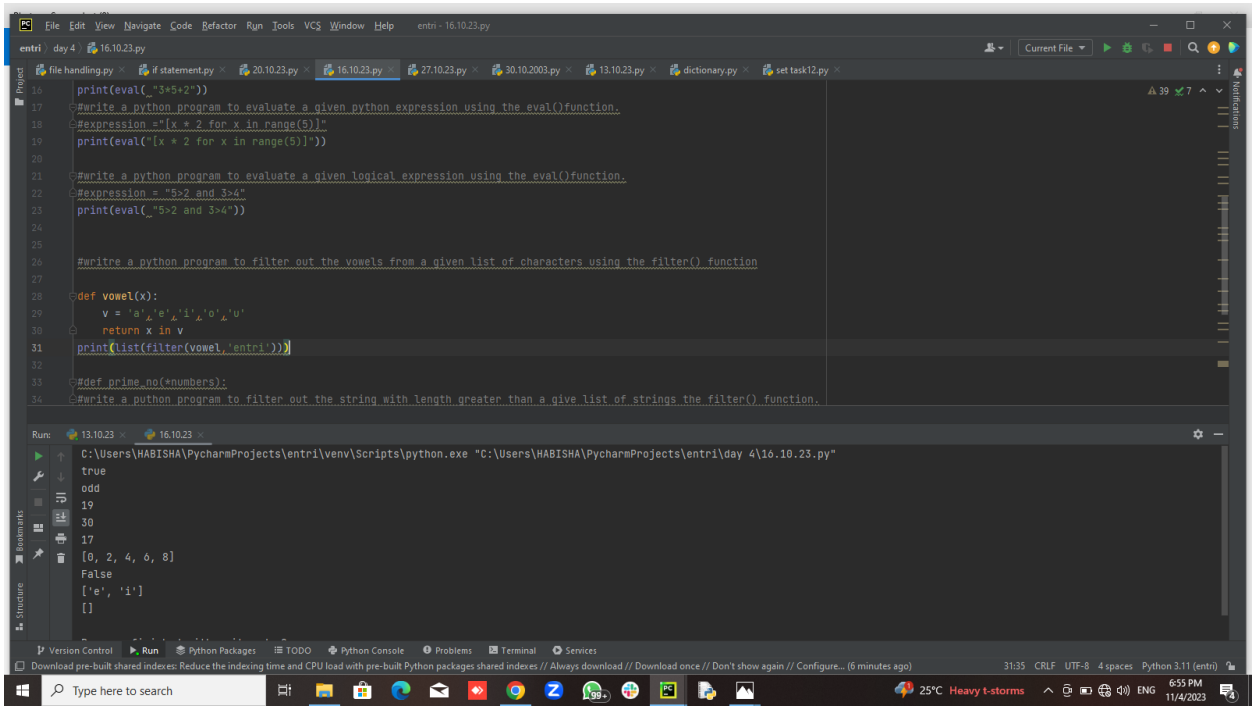
```
C:\Users\HABISHA\PycharmProjects\entri\venv\Scripts\python.exe "C:\Users\HABISHA\PycharmProjects\entri\day 4\13.10.23.py"
press 1 for addition.
 press 2 for subraction.
press 3 for multiplication.
press 4 for division
enter number1:
```

[16.10.23]



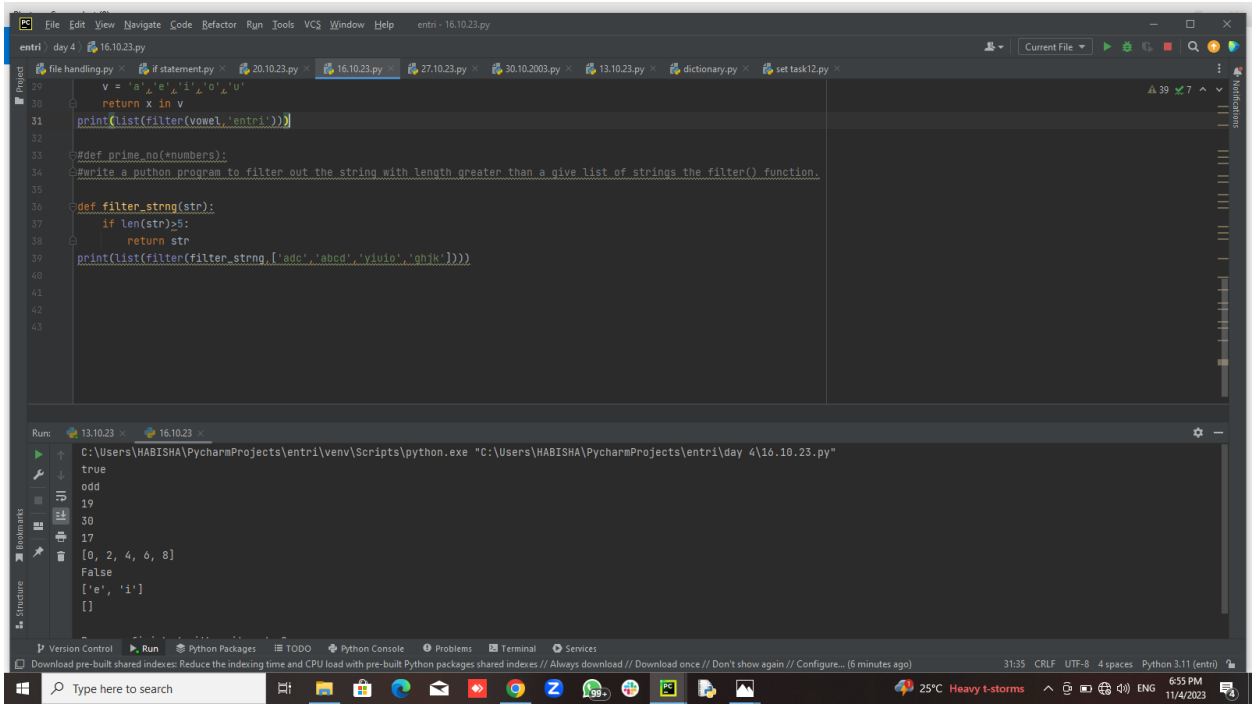
```
# write a lambda function that takes in aparameter and return true
#if the parameter is evan and false otherwise.
f=(lambda a:"true" if a%3==0 else "false")
print(f(6))
print((lambda a:"even" if a%2==0 else "odd")(5))


# write a python program to lambda function that adds 15 to a give number passed in as an argument,
#also create a lamba function that multiplies argument x with argument y and prints the result.
print((lambda x:x+15)(4))
print((lambda x,y:x*y)(6,5))

#rite a python program to evaluate a given mathematical expression using the eval()
#expression = "3*5+2"

print(eval("3*5+2"))
#write a python program to evaluate a given python expression using the eval()function.
#expression ="[x * 2 for x in range(5)]"
print(eval("[x * 2 for x in range(5)]"))
```

```
C:\Users\HABISHA\PycharmProjects\entri\venv\Scripts\python.exe "C:\Users\HABISHA\PycharmProjects\entri\day 4\16.10.23.py"
true
odd
19
30
17
[0, 2, 4, 6, 8]
False
['e', 'i']
[]
```

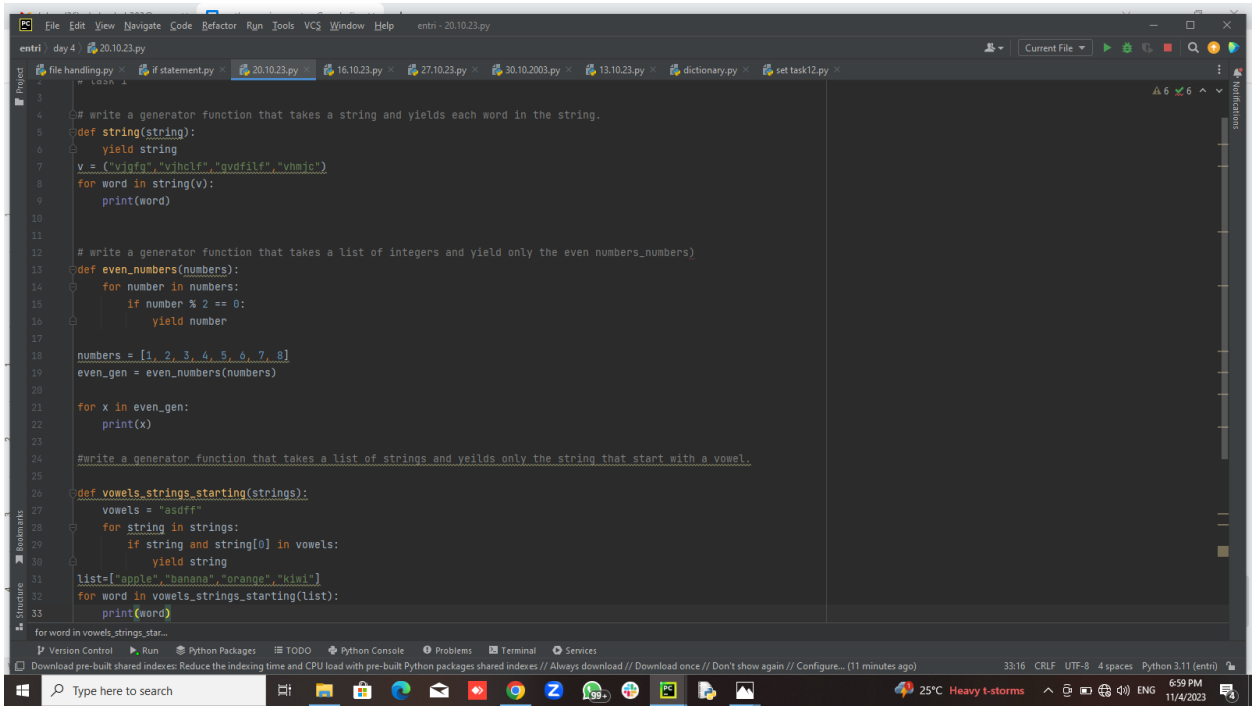


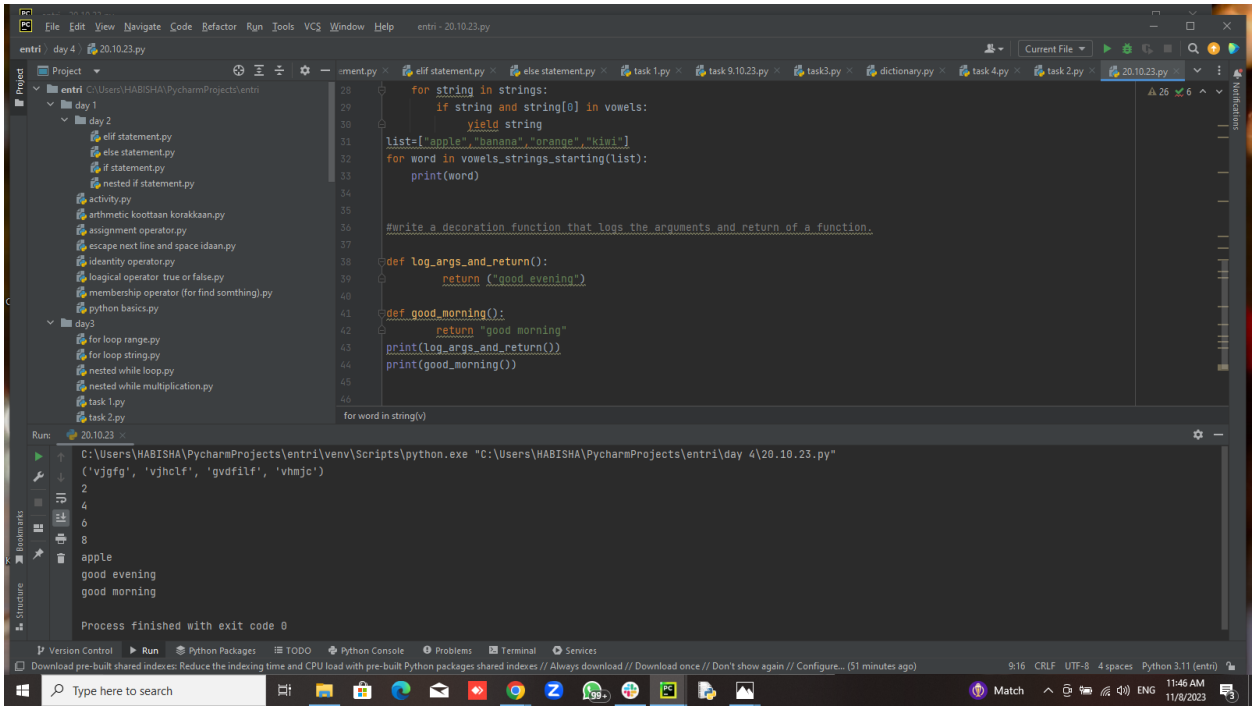
```
print(eval("3*5+2"))
#write a python program to evaluate a given python expression using the eval()function.
#expression ="[x * 2 for x in range(5)]"
print(eval("[x * 2 for x in range(5)]"))

#write a python program to evaluate a given logical expression using the eval()function.
#expression = "5>2 and 3>4"
print(eval("5>2 and 3>4"))


#writre a python program to filter out the vowels from a given list of characters using the filter() function

def vowel(x):
    v = 'a','e','i','o','u'
    return x in v
print(list(filter(vowel,'entri')))

#def prime_no(*numbers):
#write a python program to filter out the string with length greater than a give list of strings the filter() function.
```

```
C:\Users\HABISHA\PycharmProjects\entri\venv\Scripts\python.exe "C:\Users\HABISHA\PycharmProjects\entri\day 4\16.10.23.py"
true
odd
19
30
17
[0, 2, 4, 6, 8]
False
['e', 'i']
[]
```


v = 'a','e','i','o','u'
return x in v
print(list(filter(vowel,'entri')))
#def prime_no(*numbers):
#write a python program to filter out the string with length greater than a give list of strings the filter() function.
def filter_strng(str):
if len(str)>5:
return str
print(list(filter(filter_strng,['adc','abcd','yiuio','ghjk'])))
C:\Users\HABISHA\PycharmProjects\entri\venv\Scripts\python.exe "C:\Users\HABISHA\PycharmProjects\entri\day 4\16.10.23.py"
true
odd
19
30
17
[0, 2, 4, 6, 8]
False
['e', 'i']
[]

[20.10.23]


# write a generator function that takes a string and yields each word in the string.
def string(string):
yield string
v = ("vjgfg","vjhclf","gvdfilf","vhmjc")
for word in string(v):
print(word)
# write a generator function that takes a list of integers and yield only the even numbers_numbers)
def even_numbers(numbers):
for number in numbers:
if number % 2 == 0:
yield number
numbers = [1, 2, 3, 4, 5, 6, 7, 8]
even_gen = even_numbers(numbers)
for x in even_gen:
print(x)
#write a generator function that takes a list of strings and yeilds only the string that start with a vowel.
def vowels_strings_starting(strings):
vowels = "asdff"
for string in strings:
if string and string[0] in vowels:
yield string
list=["apple","banana","orange","kiwi"]
for word in vowels_strings_starting(list):
print(word)


for string in strings:
if string and string[0] in vowels:
yield string
list=["apple","banana","orange","kiwi"]
for word in vowels_strings_starting(list):
print(word)
#write a decoration function that logs the arguments and return of a function.
def log_args_and_return():
return ("good evening")
def good_morning():
return "good morning"
print(log_args_and_return())
print(good_morning())
C:\Users\HABISHA\PycharmProjects\entri\venv\Scripts\python.exe "C:\Users\HABISHA\PycharmProjects\entri\day 4\20.10.23.py"
('vjgfg', 'vjhclf', 'gvdfilf', 'vhmjc')
2
4
6
8
apple
good evening
good morning
Process finished with exit code 0