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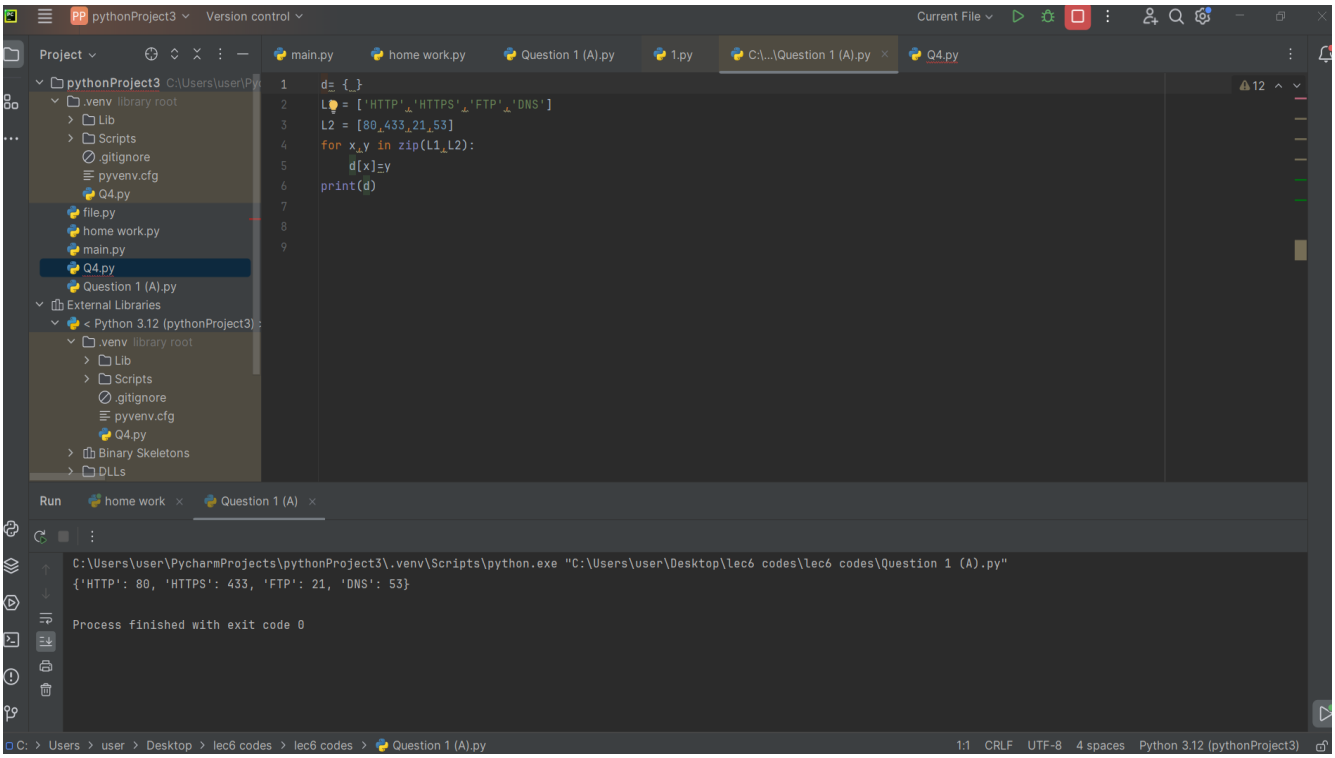
Number :2828

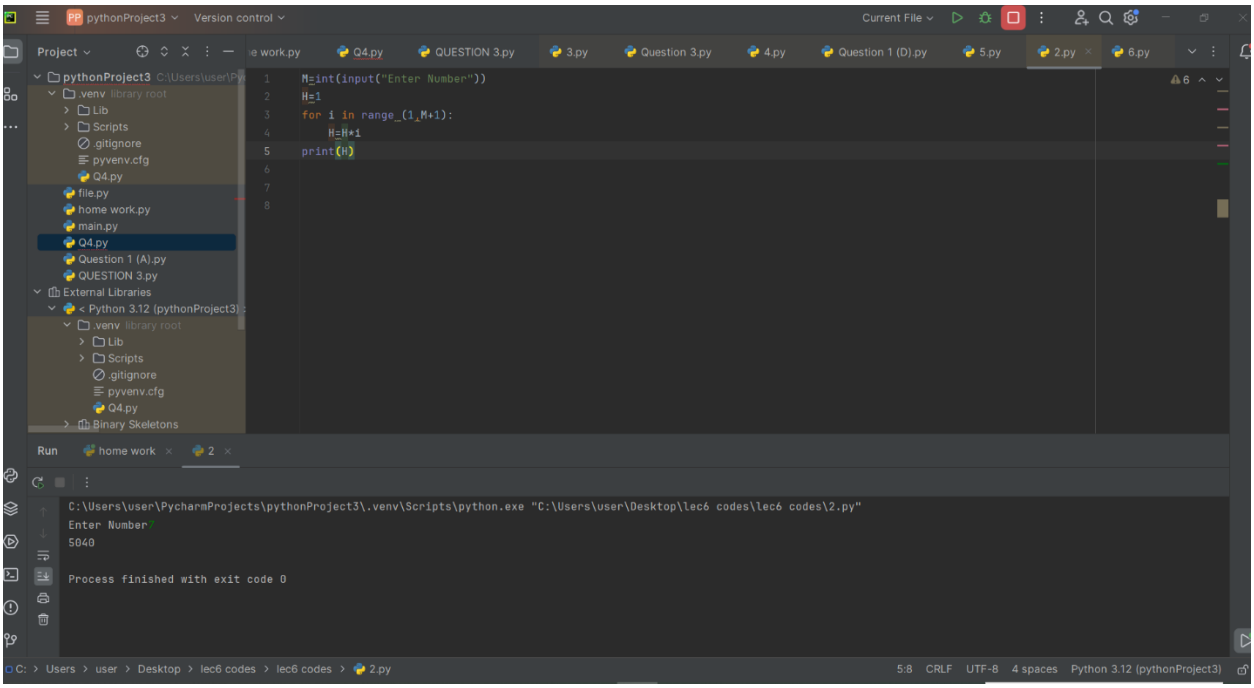
Submitted to GitHub :

Question 1:

A-If you have two lists, L1=['HTTP','HTTPS','FTP','DNS']
L2=[80,443,20,53], convert it to generate this dictionary
d={'HTTP':80,'HTTPS':443,'FTP':21,'DNS':53 }



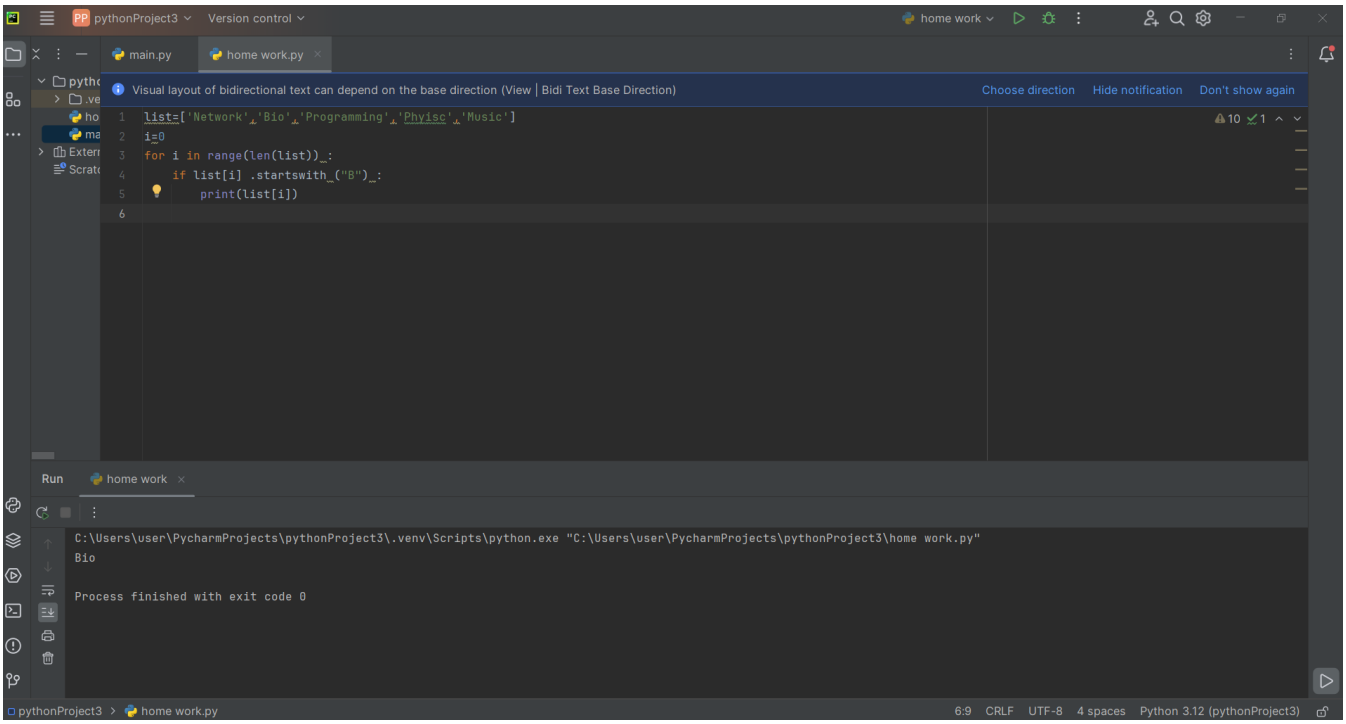
B- **Write a Python program that calculates the factorial of a given number entered by user.**



C- L=[‘Network’ , ’Bio’ , ’Programming’, ‘Physics’ , ‘Music’]

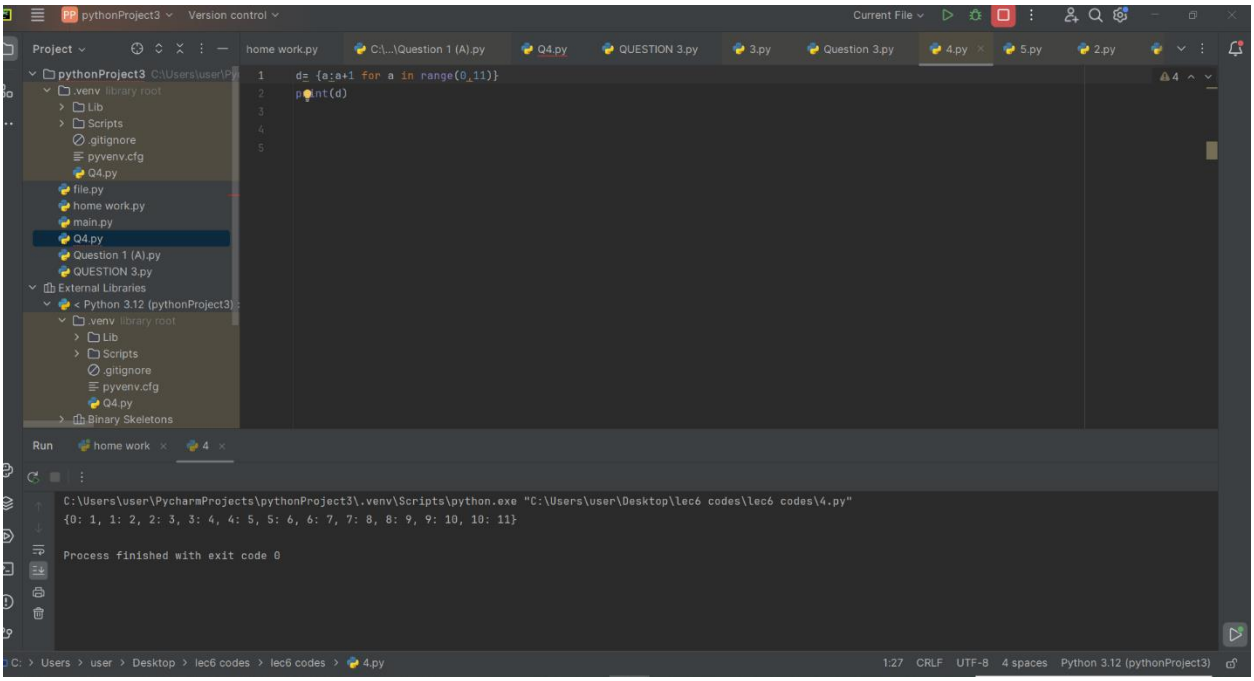
In this exercise, you will implement a Python program that reads the items of the previous list and identifies the items that starts with ‘B’ letter, then print it on screen.

Tips: using loop, ‘Len ()’ , starts with() method



D: Using Dictionary comprehension, Generate this dictionary

d={0:1,1:2,2:3,3:4,4:5,5:6,6:7,7:8,8:9,9:10,10:11}


pythonProject3
Version control
Current File
Project
home work.py
C:\...\Question 1 (A).py
Q4.py
QUESTION 3.py
3.py
Question 3.py
4.py
5.py
2.py
d= {a:a+1 for a in range(0,11)}
print(d)
pythonProject3 C:\Users\user\Py
.venv library root
Lib
Scripts
.gitignore
pyvenv.cfg
Q4.py
file.py
home work.py
main.py
Q4.py
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QUESTION 3.py
External Libraries
< Python 3.12 (pythonProject3)
.venv library root
Lib
Scripts
.gitignore
pyvenv.cfg
Q4.py
Binary Skeletons
Run
home work
4
C:\Users\user\PycharmProjects\pythonProject3\.venv\Scripts\python.exe "C:\Users\user\Desktop\lec6 codes\lec6 codes\4.py"
{0: 1, 1: 2, 2: 3, 3: 4, 4: 5, 5: 6, 6: 7, 7: 8, 8: 9, 9: 10, 10: 11}
Process finished with exit code 0
C: > Users > user > Desktop > lec6 codes > lec6 codes > 4.py
1:27
CRLF
UTF-8
4 spaces
Python 3.12 (pythonProject3)

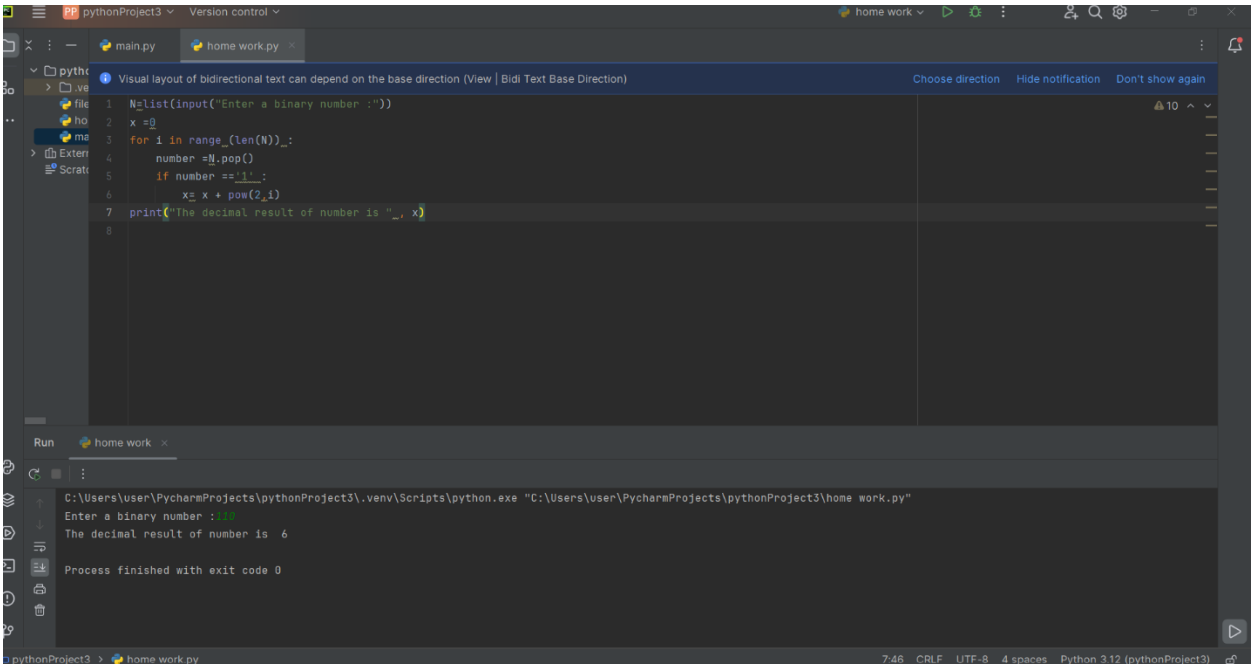
Question 2:

Convert from Binary to Decimal.

Write a Python program that converts a Binary number into its equivalent Decimal number.

The program should start reading the binary number from the user. Then the decimal equivalent number must be calculated. Finally, the program must display the equivalent decimal number on the screen.

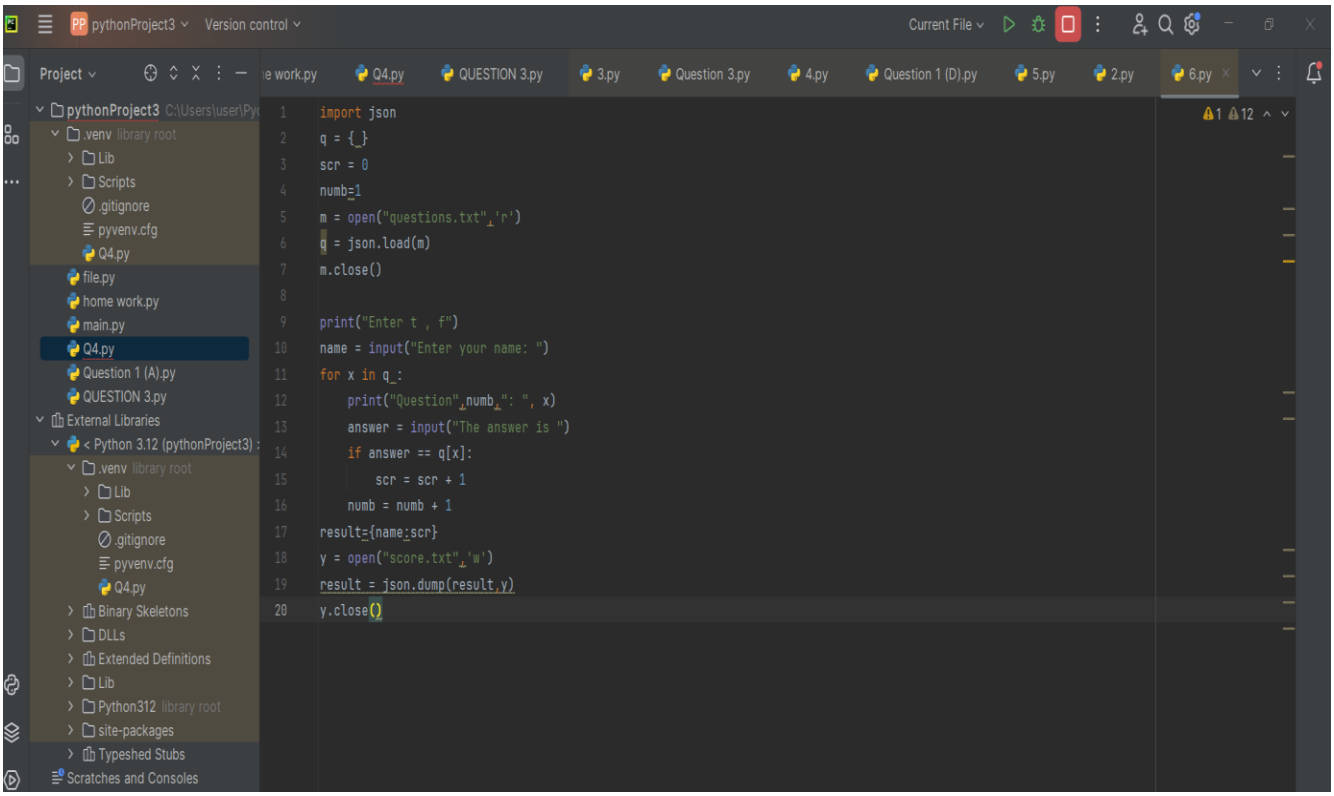
Tips: solve input errors.

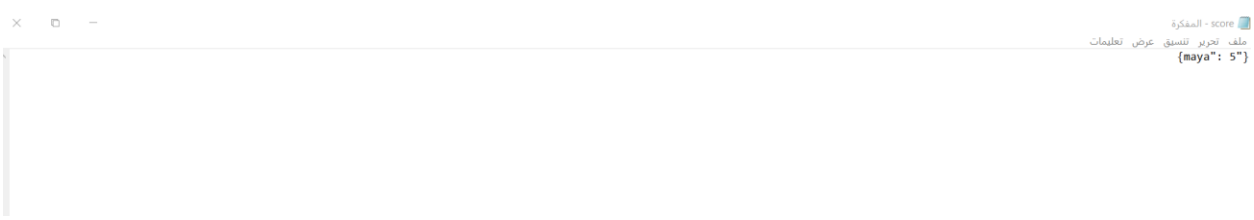


Question 3:

Working with Files" Quiz Program".

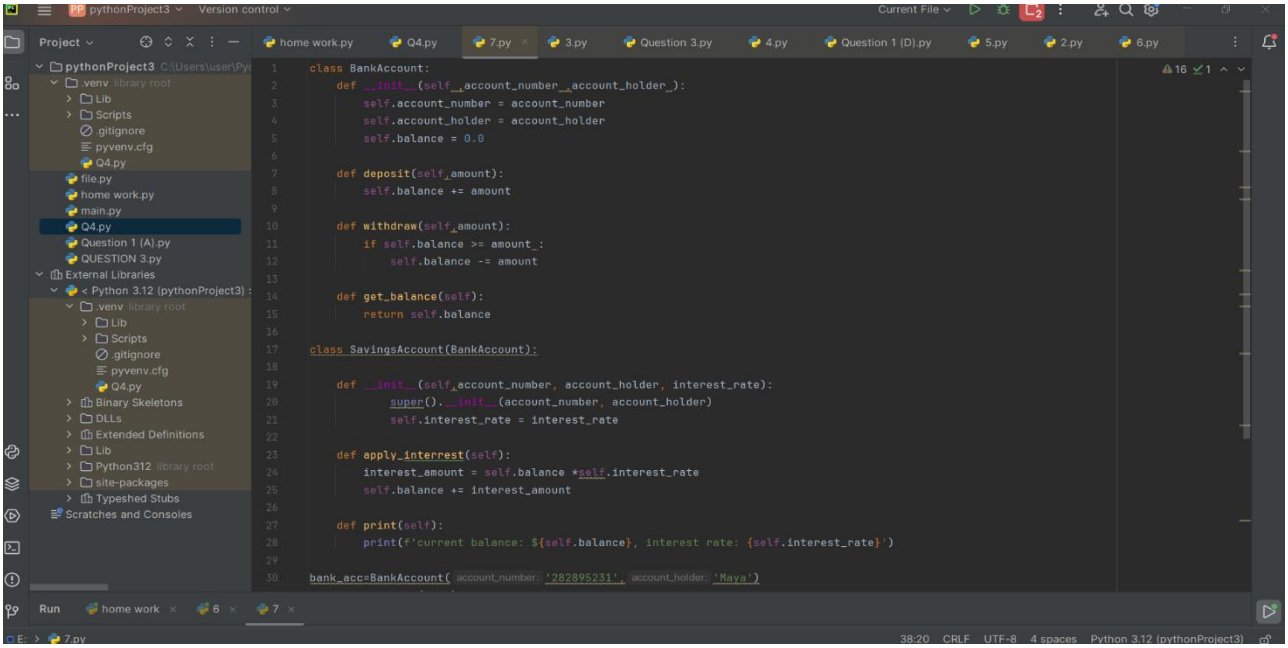
Type python quiz program that takes a text or json or csv file as input for (20 (Questions, Answers)). It asks the questions and finally computes and prints user results and store user name and result in separate file csv or json file.

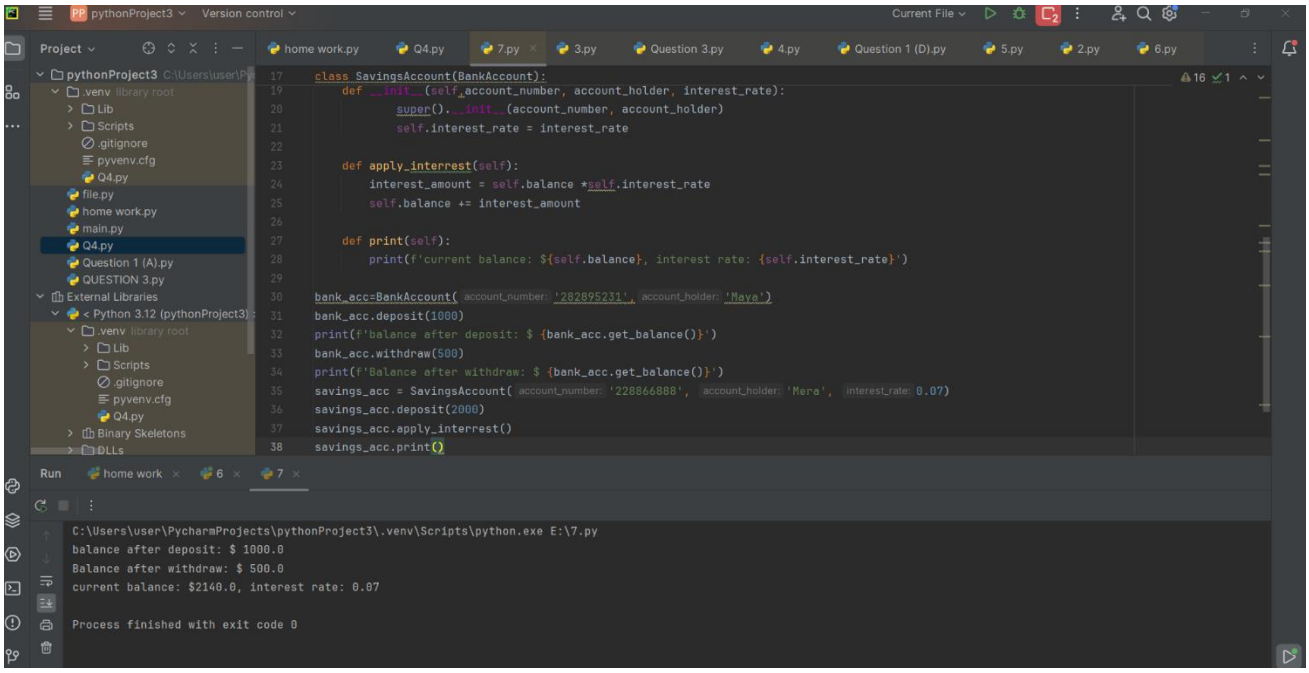




Question 4: Object-Oriented Programming – Bank Class

Define a class Bank Account with the following attributes and methods:
Attributes: account _number (string), account _holder (string), balance (float, initialized to 0.0)
Methods: deposit(amount), withdraw(amount) , get _balance()
- Create an instance of Bank Account, - Perform a deposit of $1000, - Perform a withdrawal of $500.
- Print the current balance after each operation.
- Define a subclass Savings Account that inherits from Bank Account and adds interest _rate Attribute and
apply _interest() method that Applies interest to the balance based on the interest rate.
And Override print() method to print the current balance and rate.
- Create an instance of Savings Account , and call apply _interest() and print() functions.




pythonProject3
Version control
Current File
Project
home work.py
Q4.py
7.py
3.py
Question 3.py
4.py
Question 1 (D).py
5.py
2.py
6.py
pythonProject3 C:\Users\user\Py
.venv library root
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QUESTION 3.py
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< Python 3.12 (pythonProject3)
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.gitignore
pyvenv.cfg
Q4.py
Binary Skeletons
DLLs
class SavingsAccount(BankAccount):
def __init__(self,account_number, account_holder, interest_rate):
super().__init__(account_number, account_holder)
self.interest_rate = interest_rate
def apply_interrest(self):
interest_amount = self.balance *self.interest_rate
self.balance += interest_amount
def print(self):
print(f'current balance: ${self.balance}, interest rate: {self.interest_rate}')
bank_acc=BankAccount(account_number: '282895231', account_holder: 'Maya')
bank_acc.deposit(1000)
print(f'balance after deposit: $ {bank_acc.get_balance()}')
bank_acc.withdraw(500)
print(f'Balance after withdraw: $ {bank_acc.get_balance()}')
savings_acc = SavingsAccount(account_number: '228866888', account_holder: 'Mera', interest_rate: 0.07)
savings_acc.deposit(2000)
savings_acc.apply_interrest()
savings_acc.print()
Run
home work
6
7
C:\Users\user\PycharmProjects\pythonProject3\.venv\Scripts\python.exe E:\7.py
balance after deposit: $ 1000.0
Balance after withdraw: $ 500.0
current balance: $2140.0, interest rate: 0.07
Process finished with exit code 0