Name-Varun Sharma

Roll No.-44

Question 3 :-

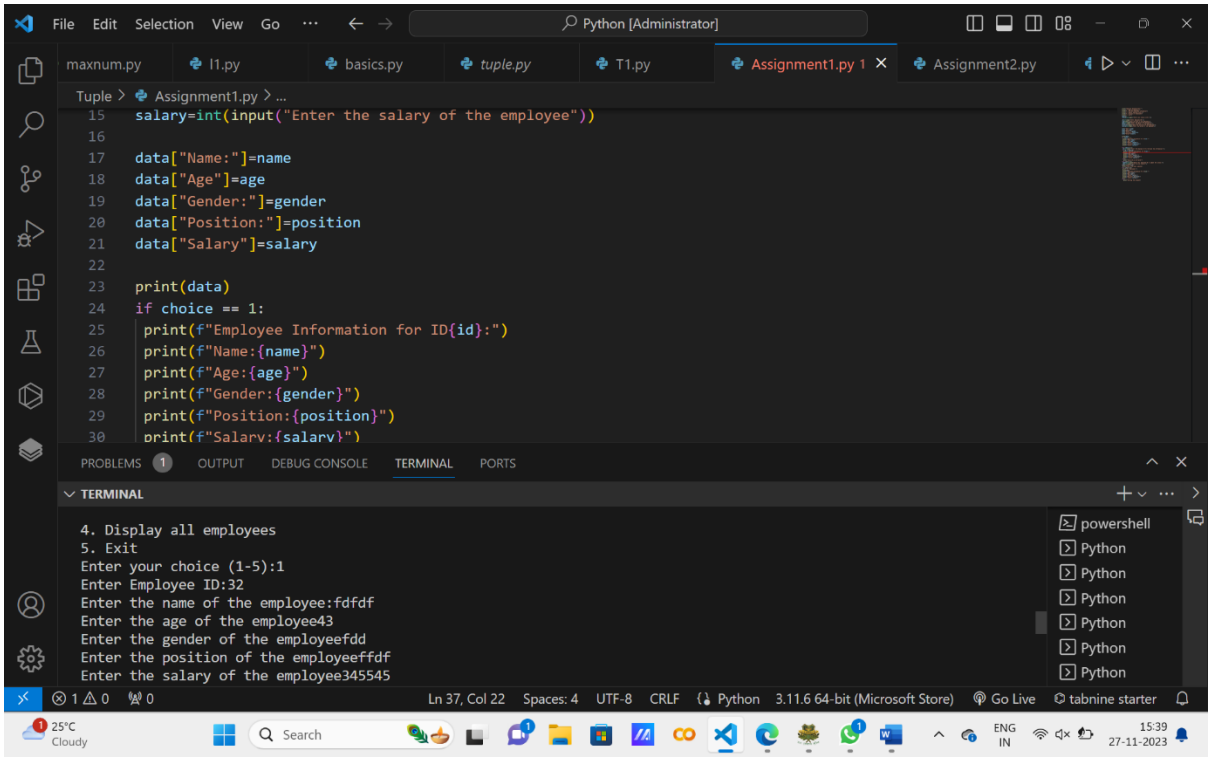
Problem Statement: Employee Database You are tasked with creating an interactive employee database system in Python. The system should allow the user to choose from various options such as adding new employees, retrieving employee information, updating employee records, and displaying information for all employees. The employee details include: 1. Employee ID: A unique identifier for each employee. 2. Name: The name of the employee. 3. Age: The age of the employee. 4. Gender: The gender of the employee. 5. Position: The job position or role of the.

Solution:-

```
print("Employee Database Menu:")
print("1. Add new employee")
print("2. Retrieve employee information")
print("3. Update employee salary")
print("4. Display all employees")
print("5. Exit")
data={}
choice=int(input(("Enter your choice (1-5):")))

id=int(input("Enter Employee ID:"))
name=input("Enter the name of the employee:")
age=int(input("Enter the age of the employee"))
gender=(input("Enter the gender of the employee"))
position=(input("Enter the position of the employee"))
salary=int(input("Enter the salary of the employee"))

data["Name:"]=name
data["Age"]=age
data["Gender:"]=gender
data["Position:"]=position
data["Salary"]=salary

print(data)
if choice == 1:
 print(f"Employee Information for ID{id}:")
 print(f"Name:{name}")
 print(f"Age:{age}")
 print(f"Gender:{gender}")
 print(f"Position:{position}")
 print(f"Salary:{salary}")
```

```
elif choice == 2:
 id=int(input("Enter the employee ID to retrieve the information:"))
 if id in data[id]:
  print(f"Employee Information for ID{id}:")
  print(f"Name:"{name}"])
  print(f"Age:{age}")
  print(f"Gender:{gender}")
  print(f"Position:{position}")
  print(f"Salary:{salary}")
 else:
  print("Given ID is not Valid!")
elif choice ==3:
 update=int(input("Enter the  employee ID to update the salary:"))
 new=int(input("Enter the new salary:"))
 data["salary"]=new
 print("Salary has been updated")
elif choice ==4:
 print("All Employees:")
 print(data)
 print(f"Employee Information for ID{id}:")
 print(f"Name:{name}")
 print(f"Age:{age}")
 print(f"Gender:{gender}")
 print(f"Position:{position}")
 print(f"Salary:{salary}")
else:
  print("Exiting the program")
```

Screenshot:-


File Edit Selection View Go
Python [Administrator]
maxnum.py
l1.py
basics.py
tuple.py
T1.py
Assignment1.py 1
Assignment2.py
Tuple > Assignment1.py > ...
15 salary=int(input("Enter the salary of the employee"))
16
17 data["Name:"]=name
18 data["Age"]=age
19 data["Gender:"]=gender
20 data["Position:"]=position
21 data["Salary"]=salary
22
23 print(data)
24 if choice == 1:
25 print(f"Employee Information for ID{id}:")
26 print(f"Name:{name}")
27 print(f"Age:{age}")
28 print(f"Gender:{gender}")
29 print(f"Position:{position}")
30 print(f"Salary:{salary}")
PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL PORTS
TERMINAL
4. Display all employees
5. Exit
Enter your choice (1-5):1
Enter Employee ID:32
Enter the name of the employee:fdfdf
Enter the age of the employee43
Enter the gender of the employeefdd
Enter the position of the employeeffdf
Enter the salary of the employee345545
powershell
Python
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Python
Ln 37, Col 22 Spaces: 4 UTF-8 CRLF Python 3.11.6 64-bit (Microsoft Store) Go Live tabnine starter
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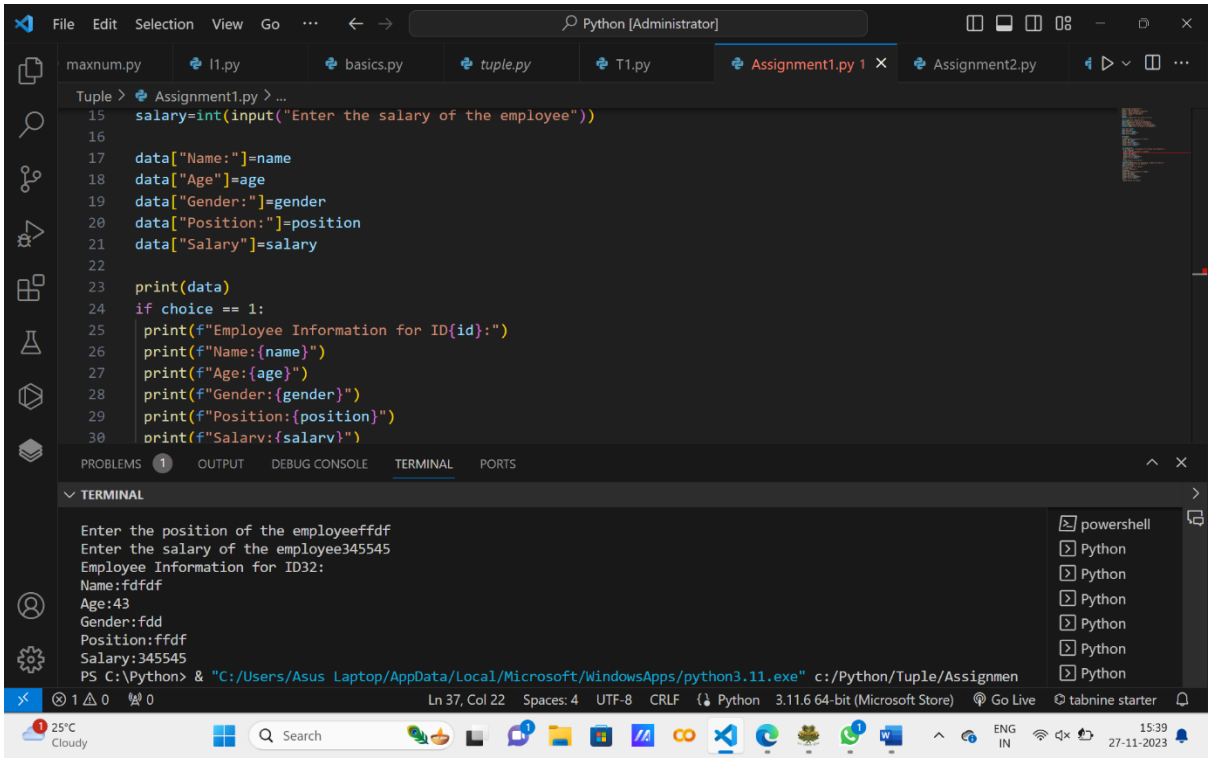
File Edit Selection View Go
Python [Administrator]
maxnum.py
l1.py
basics.py
tuple.py
T1.py
Assignment1.py 1
Assignment2.py
Tuple > Assignment1.py > ...
15 salary=int(input("Enter the salary of the employee"))
16
17 data["Name:"]=name
18 data["Age"]=age
19 data["Gender:"]=gender
20 data["Position:"]=position
21 data["Salary"]=salary
22
23 print(data)
24 if choice == 1:
25 print(f"Employee Information for ID{id}:")
26 print(f"Name:{name}")
27 print(f"Age:{age}")
28 print(f"Gender:{gender}")
29 print(f"Position:{position}")
30 print(f"Salary:{salary}")
PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL PORTS
TERMINAL
Enter the position of the employeeffdf
Enter the salary of the employee345545
Employee Information for ID32:
Name:fdfdf
Age:43
Gender:fdd
Position:ffdf
Salary:345545
PS C:\Python> & "C:/Users/Asus Laptop/AppData/Local/Microsoft/WindowsApps/python3.11.exe" c:/Python/Tuple/Assignmen
powershell
Python
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Python
Ln 37, Col 22 Spaces: 4 UTF-8 CRLF Python 3.11.6 64-bit (Microsoft Store) Go Live tabnine starter
25°C Cloudy
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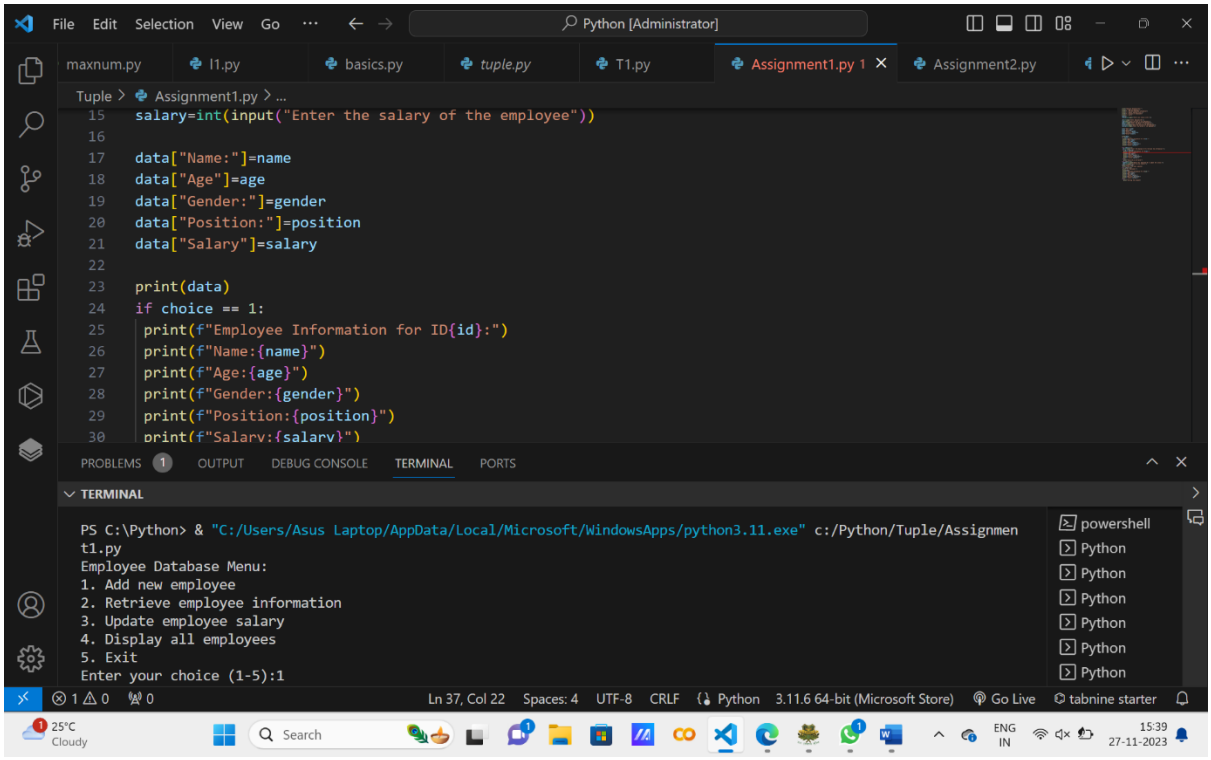
ENG IN
15:39 27-11-2023


File Edit Selection View Go
Python [Administrator]
maxnum.py
l1.py
basics.py
tuple.py
T1.py
Assignment1.py 1
Assignment2.py
Tuple > Assignment1.py > ...
15 salary=int(input("Enter the salary of the employee"))
16
17 data["Name:"]=name
18 data["Age"]=age
19 data["Gender:"]=gender
20 data["Position:"]=position
21 data["Salary"]=salary
22
23 print(data)
24 if choice == 1:
25 print(f"Employee Information for ID{id}:")
26 print(f"Name:{name}")
27 print(f"Age:{age}")
28 print(f"Gender:{gender}")
29 print(f"Position:{position}")
30 print(f"Salary:{salary}")
PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL PORTS
TERMINAL
PS C:\Python> & "C:/Users/Asus Laptop/AppData/Local/Microsoft/WindowsApps/python3.11.exe" c:/Python/Tuple/Assignment1.py
Employee Database Menu:
1. Add new employee
2. Retrieve employee information
3. Update employee salary
4. Display all employees
5. Exit
Enter your choice (1-5):1
powershell
Python
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Python
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Question 4 :-

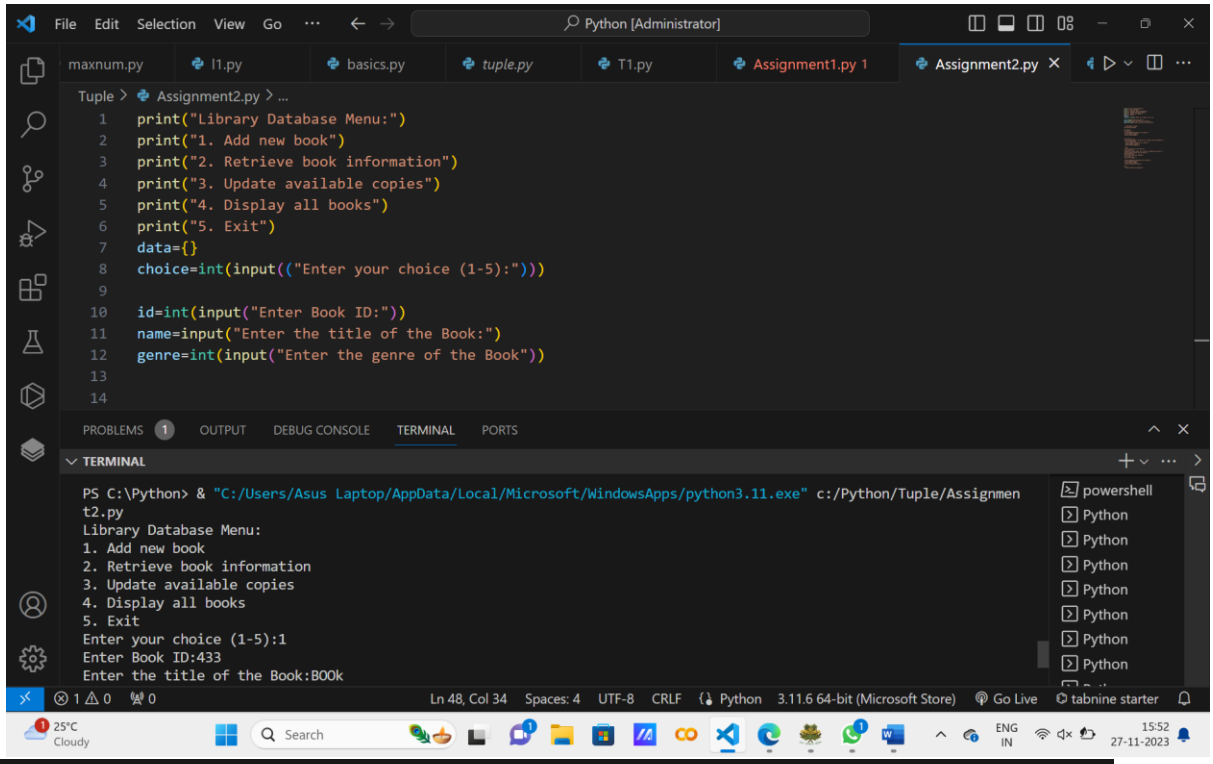
Problem Statement: Library Database You are tasked with creating an interactive library database system in Python. The system should allow the user to choose from various options such as adding new books, retrieving book information, updating the number of available copies, and displaying information for all books. Each book has the following attributes: 1. Book ID: A unique identifier for each book. 2. Title: The title of the book. 3. Author: The author of the book. 4. Genre: The genre or category of the book. 5. Available Copies: The number of copies available

Solution:

```
print("Library Database Menu:")
print("1. Add new book")
print("2. Retrieve book information")
print("3. Update available copies")
print("4. Display all books")
print("5. Exit")
data={}
choice=int(input(("Enter your choice (1-5):")))

id=int(input("Enter Book ID:"))
name=input("Enter the title of the Book:")
genre=int(input("Enter the genre of the Book"))


data["Name:"]=name
data["Genre"]=genre

print(data)
if choice == 1:
 print(f"Book Information for ID{id}:")
 print(f"Name:{name}")
 print(f"Genre:{age}")


elif choice == 2:
 id=int(input("Enter the Book ID to retrieve the information:"))
 if id in data[id]:
  print(f"Book Information for ID{id}:")
  print(f"Name:"{name}"])
  print(f"Genre:{genre}")

 else:
  print("Given ID is not Valid!")
elif choice ==3:
```

```
 update=int(input("Enter the  booh ID to update the salary:"))
 new=int(input("Enter the new book:"))
data["book"]=new
 print("Book has been updated")
elif choice ==4:
 print("All Books:")

 print(f"Employee Information for ID{id}:")
 print(f"Name:{name}")
 print(f"genre:{age}")
 print(f"Fiction:{fiction}")

else:
  print("Exiting the program")
```

Screenshot:


File Edit Selection View Go
Python [Administrator]
maxnum.py
l1.py
basics.py
tuple.py
T1.py
Assignment1.py 1
Assignment2.py
Tuple > Assignment2.py > ...
1 print("Library Database Menu:")
2 print("1. Add new book")
3 print("2. Retrieve book information")
4 print("3. Update available copies")
5 print("4. Display all books")
6 print("5. Exit")
7 data={}
8 choice=int(input(("Enter your choice (1-5):")))
9
10 id=int(input("Enter Book ID:"))
11 name=input("Enter the title of the Book:")
12 genre=int(input("Enter the genre of the Book"))
13
14
PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL PORTS
TERMINAL
PS C:\Python> & "C:/Users/Asus Laptop/AppData/Local/Microsoft/WindowsApps/python3.11.exe" c:/Python/Tuple/Assignmen
t2.py
Library Database Menu:
1. Add new book
2. Retrieve book information
3. Update available copies
4. Display all books
5. Exit
Enter your choice (1-5):1
Enter Book ID:433
Enter the title of the Book:BOOk
powershell
Python
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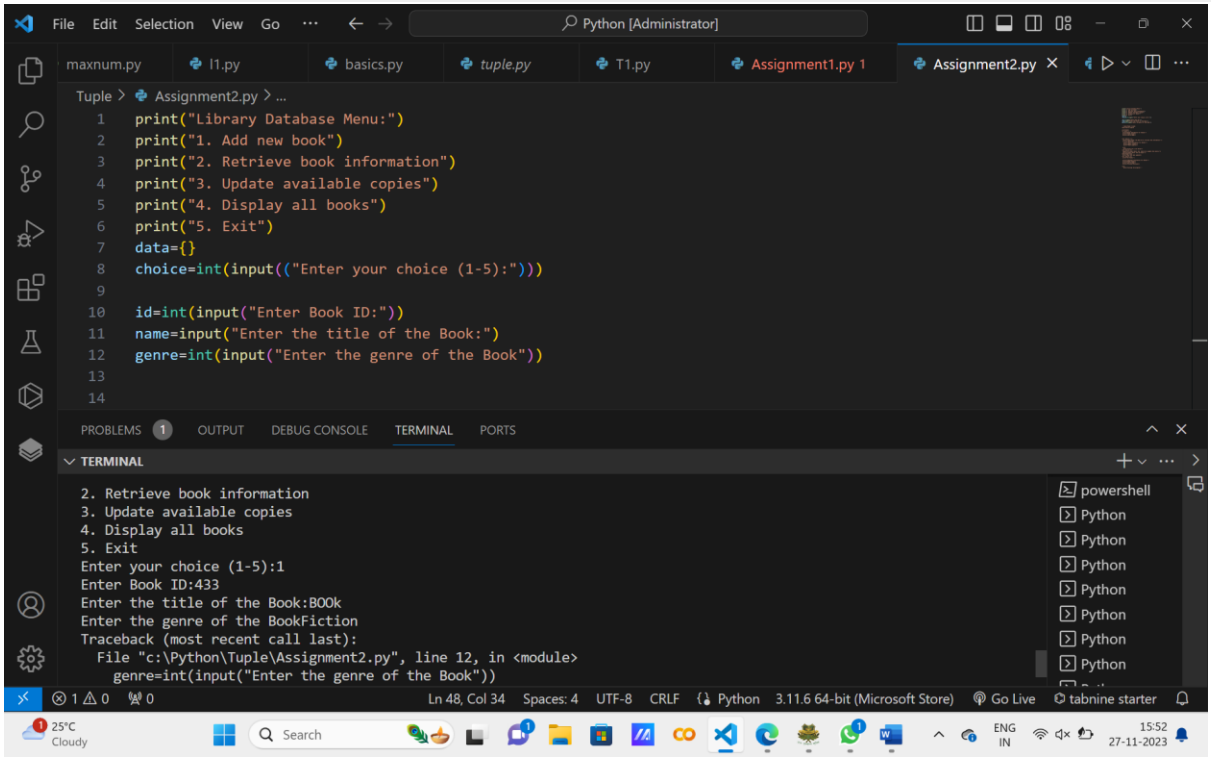
File Edit Selection View Go
Python [Administrator]
maxnum.py
l1.py
basics.py
tuple.py
T1.py
Assignment1.py 1
Assignment2.py
Tuple > Assignment2.py > ...
1 print("Library Database Menu:")
2 print("1. Add new book")
3 print("2. Retrieve book information")
4 print("3. Update available copies")
5 print("4. Display all books")
6 print("5. Exit")
7 data={}
8 choice=int(input(("Enter your choice (1-5):")))
9
10 id=int(input("Enter Book ID:"))
11 name=input("Enter the title of the Book:")
12 genre=int(input("Enter the genre of the Book"))
13
14
PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL PORTS
TERMINAL
2. Retrieve book information
3. Update available copies
4. Display all books
5. Exit
Enter your choice (1-5):1
Enter Book ID:433
Enter the title of the Book:BOOk
Enter the genre of the BookFiction
Traceback (most recent call last):
File "c:\Python\Tuple\Assignment2.py", line 12, in <module>
genre=int(input("Enter the genre of the Book"))
powershell
Python
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Python
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