Problem 2.

For this program, you are tasked to define the following:

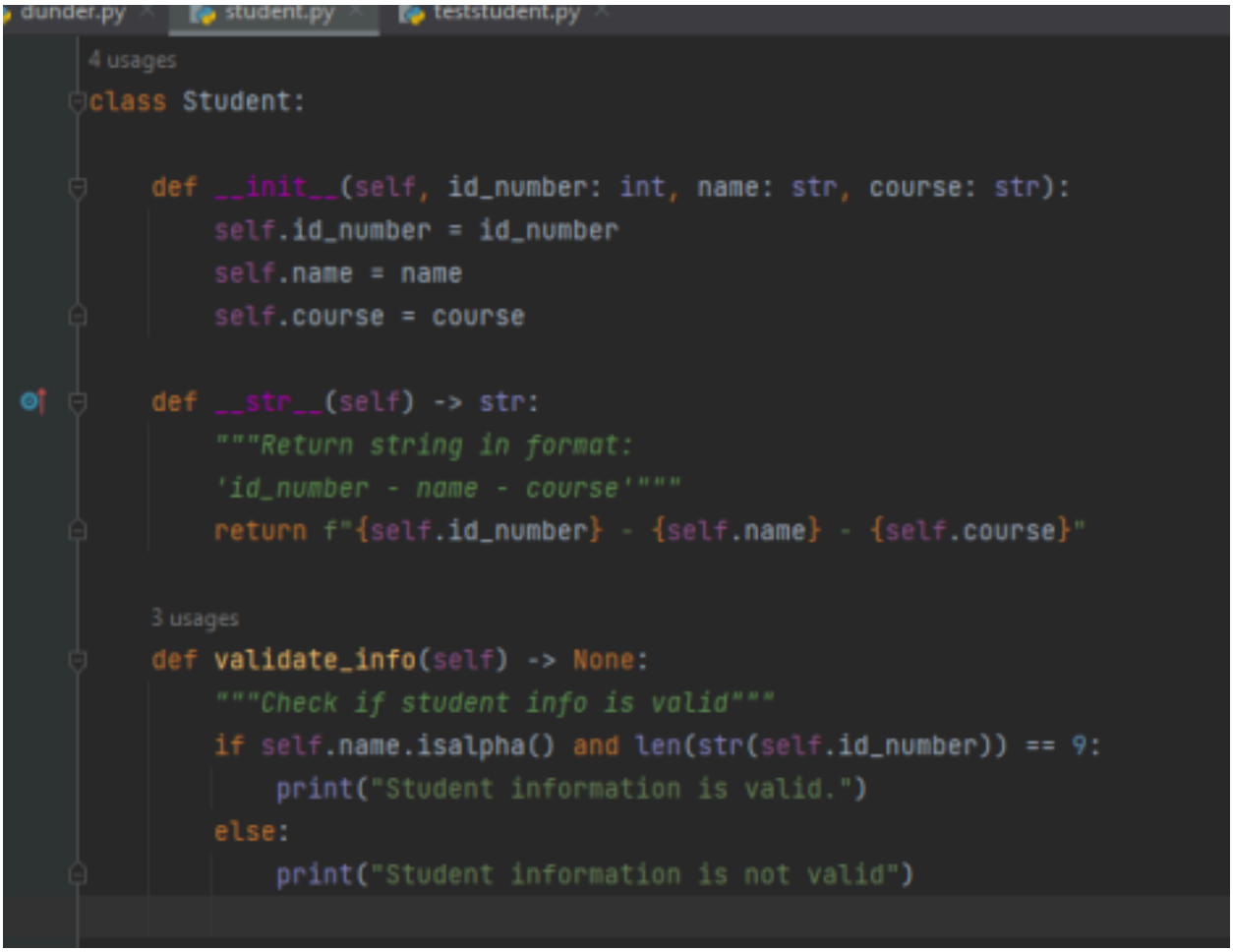
Class - Student:

- Public Properties:
  - `id_number` (type: int): A unique identifier for the student.
  - `name` (type: str): The name of the student.
  - `course` (type: str): The course the student is enrolled in.
- Methods:
  - `__str__() -> str`: Returns a string representation of the student's information in the format "{id_number} - {name} - {course}".
  - `validate_info() -> None`: Prints the message "Student information is valid." or "Student information is not valid." indicating whether the student's information is valid. Validity criteria include:
    - The `name` should contain only letters.
    - The `idNumber` should be exactly 9 digits long.

Note: Each class should be defined in its own file, with the file name following camelCase conventions (e.g., `bankAccount.py`).

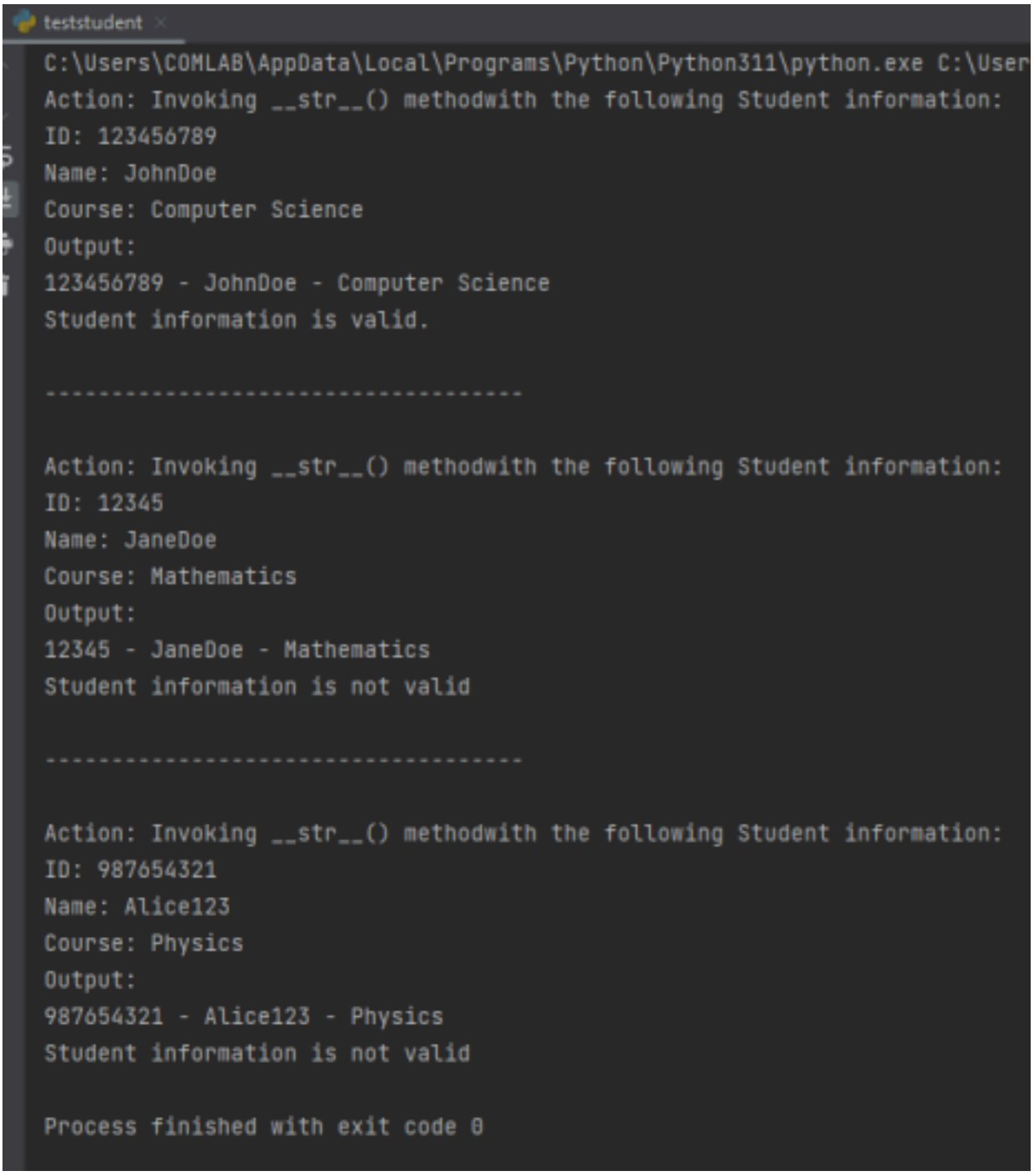
Create a test class on a separate file named **testStudent.py**

**CODE:**


dunder.py
student.py
teststudent.py
4 usages
class Student:
def __init__(self, id_number: int, name: str, course: str):
self.id_number = id_number
self.name = name
self.course = course
def __str__(self) -> str:
"""Return string in format:
'id_number - name - course'"""
return f"{self.id_number} - {self.name} - {self.course}"
3 usages
def validate_info(self) -> None:
"""Check if student info is valid"""
if self.name.isalpha() and len(str(self.id_number)) == 9:
print("Student information is valid.")
else:
print("Student information is not valid")

```python
from student import Student

# Sample Output 1
print("Action: Invoking __str__() method"
      "with the following Student information:")
s1 = Student( id_number: 123456789,  name: "JohnDoe",  course: "Computer Science")
print(f"ID: {s1.id_number}")
print(f"Name: {s1.name}")
print(f"Course: {s1.course}")
print(f"Output:")
print(s1)
s1.validate_info()

print("\n-----------------------------------\n")

# Sample Output 2
print("Action: Invoking __str__() method"
      "with the following Student information:")
s2 = Student( id_number: 12345,  name: "JaneDoe",  course: "Mathematics")
print(f"ID: {s2.id_number}")
print(f"Name: {s2.name}")
print(f"Course: {s2.course}")
print(f"Output:")
print(s2)
s2.validate_info()

print("\n-----------------------------------\n")

# Sample Output 3
print("Action: Invoking __str__() method"
      "with the following Student information:")
s3 = Student( id_number: 987654321,  name: "Alice123",  course: "Physics")
print(f"ID: {s3.id_number}")
print(f"Name: {s3.name}")
print(f"Course: {s3.course}")
print(f"Output:")
print(s3)
s3.validate_info()
```

**OUTPUT:**


teststudent
C:\Users\COMLAB\AppData\Local\Programs\Python\Python311\python.exe C:\User
Action: Invoking __str__() methodwith the following Student information:
ID: 123456789
Name: JohnDoe
Course: Computer Science
Output:
123456789 - JohnDoe - Computer Science
Student information is valid.
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Action: Invoking __str__() methodwith the following Student information:
ID: 12345
Name: JaneDoe
Course: Mathematics
Output:
12345 - JaneDoe - Mathematics
Student information is not valid
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Action: Invoking __str__() methodwith the following Student information:
ID: 987654321
Name: Alice123
Course: Physics
Output:
987654321 - Alice123 - Physics
Student information is not valid
Process finished with exit code 0