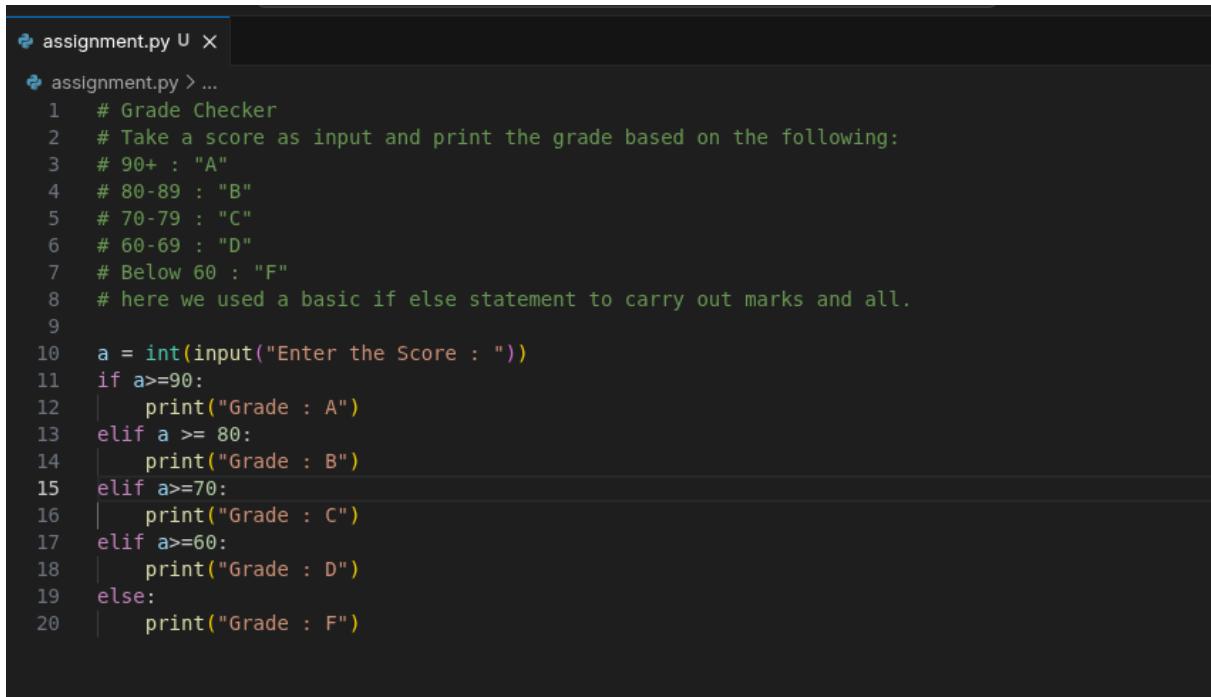


Python Assignment:

1. Initialized a variable and taking input from the user as integer. In if statement checking if the a variable is greater than equal to 90 then printing Grade a, in elif condition we are checking if the variable integer is greater than equal to 80 if yes then we print Grade B, and in the 2nd elif statement we check if the the number is greater than equal to 70 then we print Grade C, same goes for Grade D and Grade F. If any of the conditions are met then the code prints the grade.



The screenshot shows a code editor window with a dark theme. The title bar says "assignment.py U X". The code itself is a Python script named "assignment.py" with the following content:

```
# Grade Checker
# Take a score as input and print the grade based on the following:
# 90+ : "A"
# 80-89 : "B"
# 70-79 : "C"
# 60-69 : "D"
# Below 60 : "F"
# here we used a basic if else statement to carry out marks and all.

a = int(input("Enter the Score : "))
if a>=90:
    print("Grade : A")
elif a >= 80:
    print("Grade : B")
elif a>=70:
    print("Grade : C")
elif a>=60:
    print("Grade : D")
else:
    print("Grade : F")
```

```

sh-5.3$ /usr/bin/python /home/jaikumar/Desktop/test_dir/assignment.py
Enter the Score : 89
Grade : B
sh-5.3$ /usr/bin/python /home/jaikumar/Desktop/test_dir/assignment.py
Enter the Score : 70
Grade : C
sh-5.3$ /usr/bin/python /home/jaikumar/Desktop/test_dir/assignment.py
Enter the Score : 60
Grade : D
sh-5.3$ /usr/bin/python /home/jaikumar/Desktop/test_dir/assignment.py
Enter the Score : 90
Grade : A
sh-5.3$ /usr/bin/python /home/jaikumar/Desktop/test_dir/assignment.py
Enter the Score : 59
Grade : F
sh-5.3$ 

```

2. Declared a variable and stored the dictionary key and value pair, then printed an option list for the user. Used While True loop to run the loop indefinitely and make changes, based on the option chosen from the user, checking the if statement for the options, if the user selects 1 then the add user if statement runs and get the input from the user which are the name and the grade, then displays the data on the screen, if the user selects 2 then the update elif statement is executed, it 1st displays the names of the students and then ask the name of the student which the user want to update, ans then it asks the new grade, if the user selects 3 then it displays all the keys and value pair. The last 4th option is just to stop the while loop and exit the code.

```

name_grade = {"Jaikumar" : "A", "Danish" : "A"}

while True:
    print("\n1. Add a student and grade\n2. Update a student's grade\n3. Display all the student's grade\n4. Exit\n")
    i = int(input("Choose a number : "))

    if i == 1:
        #Add the Details
        a = input("Enter the Name of Student : ")
        b = input("Enter the Grade of the Student : ")
        name_grade[a] = b
        print("\n",name_grade)
    elif i == 2:
        #Update the Grade
        for keys in name_grade.keys():
            print(keys)
        a = input("\nEnter the Student Name for update : ")
        b = input("Enter the new Grade : ")
        name_grade[a] = b
        print("\n",name_grade)
    elif i == 3:
        for key, value in name_grade.items():
            print(f"{key}: {value} Grade")
    elif i == 4:
        break
    else:
        print("Wrong Input")

```

```
1. Add a student and grade
2. Update a student's grade
3. Display all the student's grade
4. Exit

Choose a number : 1
Enter the Name of Student : Alex
Enter the Grade of the Student : A

{'Jaikumar': 'A', 'Danish': 'A', 'Alex': 'A'}
```

```
1. Add a student and grade
2. Update a student's grade
3. Display all the student's grade
4. Exit

Choose a number : 2
Jaikumar
Danish
Alex

Enter the Student Name for update : Alex
Enter the new Grade : B

{'Jaikumar': 'A', 'Danish': 'A', 'Alex': 'B'}
```

```
1. Add a student and grade
2. Update a student's grade
3. Display all the student's grade
4. Exit

Choose a number : 3
Jaikumar: A Grade
Danish: A Grade
Alex: B Grade

1. Add a student and grade
2. Update a student's grade
3. Display all the student's grade
4. Exit

Choose a number : 4
```

3. Question:

3. Write to a File

Write a program to create a text file and write some content to it.

Using file functions like write and open.

4. Read from a File

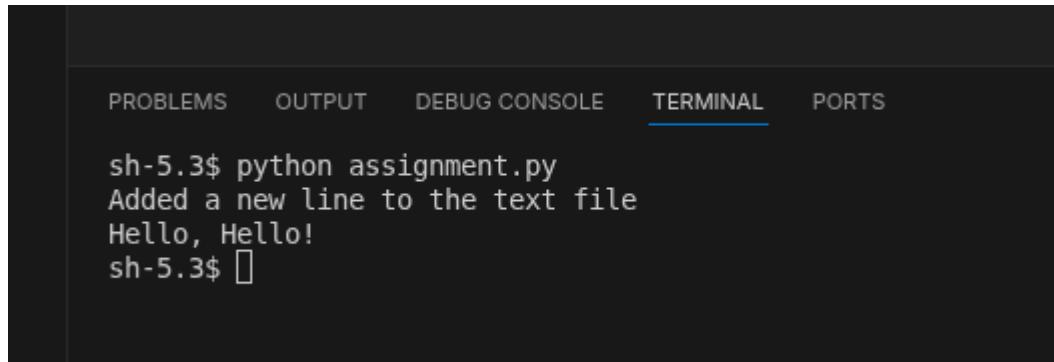
We used open in read mode and file.read to read and print to display.

Combined the 3rd and 4th one in the Same Below.

Opened a file named myfile.txt in write mode, if the file doesn't exist, then it automatically creates one. Used write function to add the line to the file and closed the file, used another variable a to open the file in read mode and used read function to print the content of the file on the terminal. And lastly I closed the file.

```
f = open("myfile.txt","w")
f.write("Added a new line to the text file\nHello, Hello!")
f.close()

a = open("myfile.txt","+r")
print(a.read())
a.close()
```



The screenshot shows a terminal window with several tabs at the top: PROBLEMS, OUTPUT, DEBUG CONSOLE, TERMINAL (which is underlined), and PORTS. The terminal content is as follows:

```
sh-5.3$ python assignment.py
Added a new line to the text file
Hello, Hello!
sh-5.3$ []
```