

1. Grade Checker

Code:

```
score = int(input("Enter your score: "))

if score >= 90:
    print("Grade: A")
elif score >= 80:
    print("Grade: B")
elif score >= 70:
    print("Grade: C")
elif score >= 60:
    print("Grade: D")
else:
    print("Grade: F")

# This program takes a numerical score as input and outputs the
corresponding letter grade.
```

Explanation

This program takes the student's score as input and checks it using **if-elif-else** conditions:

```
If score ≥ 90 → Grade A
If score ≥ 80 → Grade B
If score ≥ 70 → Grade C
```

```
If score  $\geq$  60  $\rightarrow$  Grade D
Otherwise  $\rightarrow$  Grade F
```

Otherwise \rightarrow Grade F

Output:

```
grades.py / ...  
1 score = int(input("Enter your score: "))  
2  
3 if score >= 90:  
4     print("Grade: A")  
5 elif score >= 80:  
6     print("Grade: B")  
7 elif score >= 70:  
8     print("Grade: C")  
9 elif score >= 60:  
10    print("Grade: D")  
11 else:  
12    print("Grade: F")  
13 # This program takes a numerical score as input and outputs the corresponding letter grade.
```

OUTPUT DEBUG CONSOLE TERMINAL PORTS PROBLEMS Python Debug Console + - [] [X] [] [] [] []

```
PS C:\Users\saiiku\OneDrive\Desktop\pytho> c;; cd 'c:\Users\saiiku\OneDrive\Desktop\pytho'; & 'c:\Users\saiiku\AppData\Local\Programs\Python\Python310\python.exe'  
'c:\Users\saiiku\.vscode\extensions\ms-python.debugpy-2025.18.0-win32-x64\bundled\libs\debugpy\launcher' '65108' '--' 'C:\Users\saiiku\OneDrive\Desktop\pytho\gra  
des.py'  
Enter your score: 86  
Grade: B  
PS C:\Users\saiiku\OneDrive\Desktop\pytho> c;; cd 'c:\Users\saiiku\OneDrive\Desktop\pytho'; & 'c:\Users\saiiku\AppData\Local\Programs\Python\Python310\python.exe'  
'c:\Users\saiiku\.vscode\extensions\ms-python.debugpy-2025.18.0-win32-x64\bundled\libs\debugpy\launcher' '65127' '--' 'C:\Users\saiiku\OneDrive\Desktop\pytho\gra  
des.py'  
Enter your score: 57  
Grade: F  
PS C:\Users\saiiku\OneDrive\Desktop\pytho>
```

2 Student Grades

```
students = {}

while True:

    print("\n1. Add Student")

    print("2. Update Student Grade")

    print("3. Display All Students")

    print("4. Exit")
```

```
choice = input("Enter your choice: ")

if choice == "1":

    name = input("Enter student name: ")

    grade = input("Enter grade: ")

    students[name] = grade

    print("Student added successfully!")

elif choice == "2":

    name = input("Enter student name to update: ")

    if name in students:

        grade = input("Enter new grade: ")

        students[name] = grade

        print("Grade updated successfully!")

    else:

        print("Student not found!")

elif choice == "3":

    print("\nStudent Grades:")

    for name, grade in students.items():

        print(name, ":", grade)

elif choice == "4":

    break
```

```
else:  
    print("Invalid choice!")
```

Explanation:

This program uses a dictionary to store student names and grades.

Functions:

Add a student

Update student grade

Display all students

Exit program

It uses:

dictionary

if-else

while loop

Output:

```
1. Add Student

2. Update Student Grade

3. Display All Students

4. Exit

Enter your choice: 1

Enter student name: santosh

Enter grade: 8.6

Student added successfully!


1. Add Student

2. Update Student Grade

3. Display All Students

4. Exit

Enter your choice: 1

Enter student name: surya

Enter grade: 7.6

Student added successfully!


1. Add Student

2. Update Student Grade

3. Display All Students

4. Exit
```

```
Enter your choice: 2

Enter student name to update: surya

Enter new grade: 9.3

Grade updated successfully!

1. Add Student
2. Update Student Grade
3. Display All Students
4. Exit

Enter your choice: 3

Student Grades:

santosh : 8.6

surya : 9.3

1. Add Student
2. Update Student Grade
3. Display All Students
4. Exit
```

3. Write a File:

Code

```
file = open("sample.txt", "w")

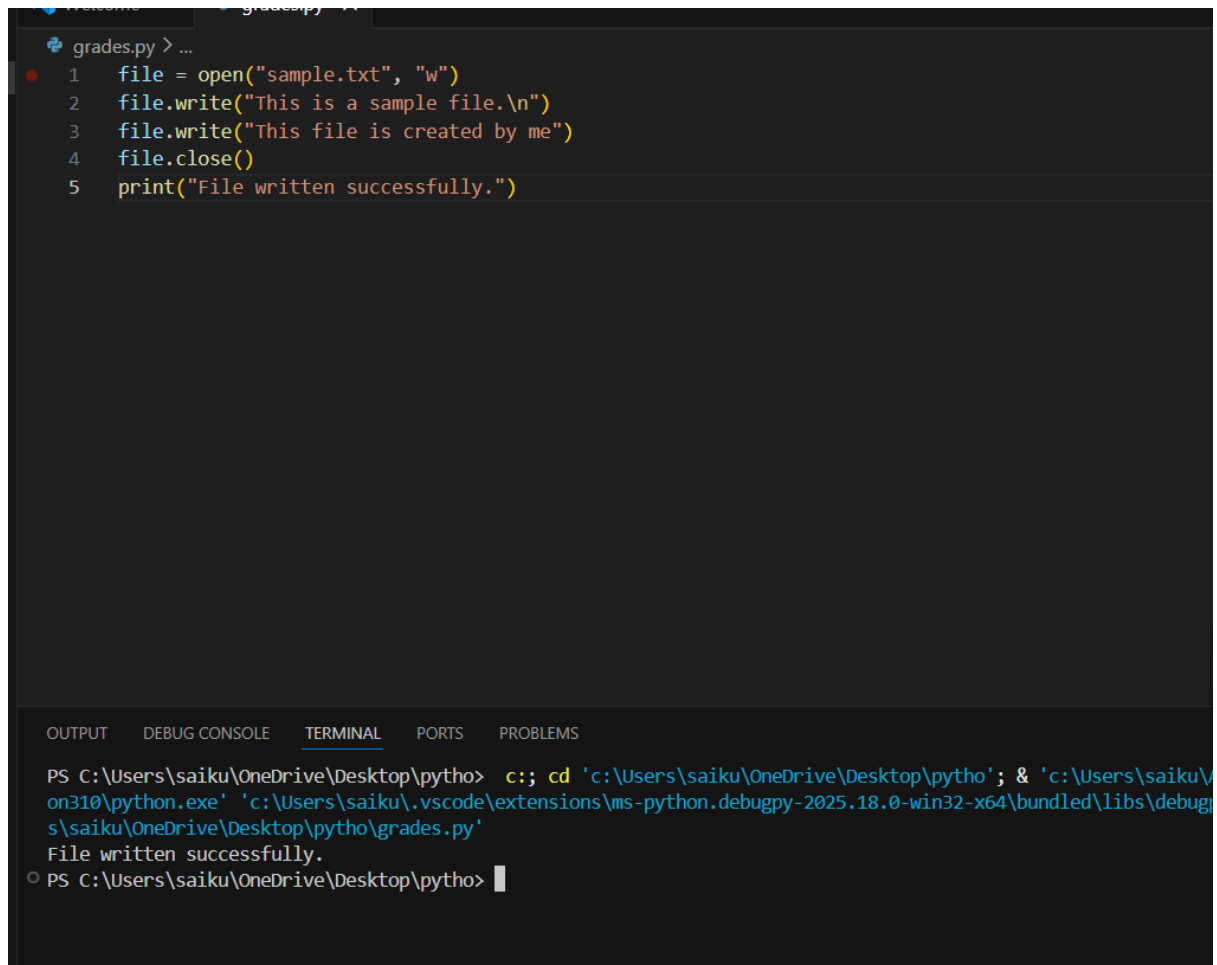
file.write("This is a sample file.\n")

file.write("This file is created by me")

file.close()

print("File written successfully.")
```

Output:



The screenshot shows a VS Code editor with a file named `grades.py` open. The code in the editor is as follows:

```
1 file = open("sample.txt", "w")
2 file.write("This is a sample file.\n")
3 file.write("This file is created by me")
4 file.close()
5 print("File written successfully.")
```

Below the editor, the **TERMINAL** tab is active, showing the command prompt output:

```
PS C:\Users\saiku\OneDrive\Desktop\pytho> c:: cd 'c:\Users\saiku\OneDrive\Desktop\pytho'; & 'c:\Users\saiku\on310\python.exe' 'c:\Users\saiku\.vscode\extensions\ms-python.debugpy-2025.18.0-win32-x64\bundled\libs\debugpy\saiku\OneDrive\Desktop\pytho\grades.py'
File written successfully.
PS C:\Users\saiku\OneDrive\Desktop\pytho>
```

Explanation:

This program:

- . Opens a file in write mode
- . Writes Text into it
- . Saves and closes the file

4 Read From A File

Code:

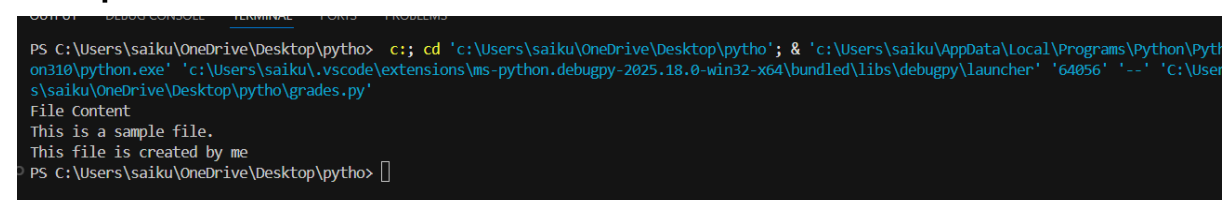
```
file = open("sample.txt", "r")
content = file.read()
print("File Content")
print(content)
file.close()
```

Explanation:

This program:

- .Opens a file in read mode
- .Reads the contents using read()
- .Prints it on the screen

Output:



```
PS C:\Users\saiku\OneDrive\Desktop\pytho> c:: cd 'c:\Users\saiku\OneDrive\Desktop\pytho'; & 'c:\Users\saiku\AppData\Local\Programs\Python\Python310\python.exe' 'c:\Users\saiku\.vscode\extensions\ms-python.debugpy-2025.18.0-win32-x64\bundled\libs\debugpy\launcher' '64056' '--' 'C:\Users\saiku\OneDrive\Desktop\pytho\grades.py'
File Content
This is a sample file.
This file is created by me
PS C:\Users\saiku\OneDrive\Desktop\pytho>
```