

## 1. 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.

The screenshot shows a Jupyter Notebook cell with the following content:

```
[1] # Grade Checker
✓ 5s score = int(input("Enter the score: "))

if score >= 90:
    grade = "A"
elif score >= 80:
    grade = "B"
elif score >= 70:
    grade = "C"
elif score >= 60:
    grade = "D"
else:
    grade = "F"

print(f"The grade is: {grade}")
|
```

Below the cell, the output is shown:

```
... Enter the score: 98
The grade is: A
```

## 2. Student Grades

Create a dictionary where the keys are student names and the values are their grades. Allow the user to:

Add a new student and grade.

Update an existing student's grade.

Print all student grades.

Used dictionary and basic operations. Using if else:

```
[2] # Student Grades Program
students = {} # Empty dictionary to store student grades

while True:
    print("\n1. Add Student\n2. Update Grade\n3. Print All Grades\n4. Exit")
    choice = input("Enter your choice: ")

    if choice == "1": # Add new student
        name = input("Enter student name: ")
        grade = input("Enter grade: ")
        if name in students:
            print(f"{name} already exists.")
        else:
            students[name] = grade
            print(f"{name} added with grade {grade}.") 

    elif choice == "2": # Update existing grade
        name = input("Enter student name to update: ")
        if name in students:
            grade = input("Enter new grade for {name}: ")
            students[name] = grade
            print(f"{name}'s grade updated to {grade}.")
        else:
            print(f"{name} does not exist.")

    elif choice == "3": # Print all grades
        print("\nAll Student Grades:")
        for name, grade in students.items():


```

### 3. Write to a File

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

```
[4] # Read from a File
filename = "example.txt"

with open(filename, "r") as file:
    content = file.read()

print("File contents:")
print(content)

...
File contents:
Hello, this is a sample file.
You can write multiple lines.
```

```
[5] # Write to a File
filename = "example.txt"

with open(filename, "w") as file:
    file.write("Hello, this is a sample file.\n")
    file.write("You can write multiple lines.\n")

print(f"Content written to {filename}")

...
Content written to example.txt
```

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.