Q1) 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.

**Solution:**

# Grade Checker Program

# Take score input from the user

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

# Check grade using if-else

if score >= 90:

grade = "A"

elif score >= 80:

grade = "B"

elif score >= 70:

grade = "C"

elif score >= 60:

grade = "D"

else:

grade = "F"

# Print result

print(f"Your grade is: {grade}")

**Explanaton:**

The program takes an integer score as input.

Uses if-elif-else conditions to decide the grade.

Prints the grade.

2Q) 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:

**Solution:**

# Student Grades Program

# Dictionary to store student names and grades

student\_grades = {}

while True:

print("\n--- Student Grades Menu ---")

print("1. Add a new student and grade")

print("2. Update an existing student's grade")

print("3. Print all student grades")

print("4. Exit")

choice = int(input("Enter your choice (1-4): "))

if choice == 1:

name = input("Enter student name: ")

grade = input("Enter grade: ")

student\_grades[name] = grade

print(f"{name} added with grade {grade}.")

elif choice == 2:

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

if name in student\_grades:

grade = input("Enter new grade: ")

student\_grades[name] = grade

print(f"{name}'s grade updated to {grade}.")

else:

print(f"Student {name} not found.")

elif choice == 3:

if student\_grades:

**Explanation:**

Keeps student names + grades in a dictionary.

Lets you **add**, **update**, or **print** all grades.

Runs in a loop until you choose **Exit (4)**.

3Q).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.

**Solution:**

# Write to a File Program

# Open a file in write mode ("w")

# If the file doesn't exist, it will be created

with open("myfile.txt", "w") as file:

file.write("Hello, this is my first file in Python!\n")

file.write("I am learning file handling using open() and write().\n")

print("File created and content written successfully by Hasan!")

**Explanation:**

open("myfile.txt", "w") → opens/creates a file in **write mode**.

file.write("text") → writes text into the file.

with is used so the file is **automatically closed** after writing.

4Q). Read from a File We used open in read mode and file.read to read and print to display.

# Read from a File Program

# Open the file in read mode ("r")

with open("myfile.txt", "r") as file:

content = file.read()

# Print the content of the file

print("File Content:\n")

print(content)

**Explanation:**

open("myfile.txt", "r") → opens the file in **read mode**.

file.read() → reads the **entire content** of the file.

with automatically closes the file after reading.