**PYTHON ASSIGNMENT**

1. **grade\_checker.py**

# enter your marks here

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

# if marks are greater than or equal to 90

if marks >= 90:

    print("Grade: A")

# if marks are between 80 and 89

elif marks >= 80:

    print("Grade: B")

# if marks are between 70 and 79

elif marks >= 70:

    print("Grade: C")

# if marks are between 60 and 69

elif marks >= 60:

    print("Grade: D")

# if marks are below 60

else:

    print("Grade: F")

PS D:\placement-notes\Tute Dude\Assignment2> python .\grade\_checker.py

Enter your marks: 95

Grade: A

PS D:\placement-notes\Tute Dude\Assignment2> python .\grade\_checker.py

Enter your marks: 85

Grade: B

PS D:\placement-notes\Tute Dude\Assignment2> python .\grade\_checker.py

Enter your marks: 75

Grade: C

PS D:\placement-notes\Tute Dude\Assignment2> python .\grade\_checker.py

Enter your marks: 65

Grade: D

PS D:\placement-notes\Tute Dude\Assignment2> python .\grade\_checker.py

Enter your marks: 55

Grade: F

1. **student\_grades.py**

# dictionary to store student and their grades

grades = {

    "Alice": 'A',

    "Bob": 'B',

    "Charlie": 'C',

    "David": 'D',

    "Eve": 'F'

}

# main loop to interact with the user

while True:

    print("\nChoose an option:")

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

    # if choice is 1, add a new student and grade

    if choice == '1':

        name = input("Enter student name: ")

        grade = input("Enter grade: ")

        if name in grades:

            print(f"{name} already exists.")

        else:

            grades[name] = grade

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

    # if choice is 2, update an existing student's grade

    elif choice == '2':

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

        if name in grades:

            grade = input("Enter new grade: ")

            grades[name] = grade

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

        else:

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

    # if choice is 3, print all student grades

    elif choice == '3':

        print("Student Grades:")

        for student, grade in grades.items():

            print(f"{student}: {grade}")

    # if choice is 4, exit the program

    elif choice == '4':

        print("Exiting program.")

        break

    # if choice is invalid, prompt again

    else:

        print("Invalid choice. Please try again.")

PS D:\placement-notes\Tute Dude\Assignment2> python .\student\_grades.py

Choose an option:

1. Add a new student and grade

2. Update an existing student's grade

3. Print all student grades

4. Exit

Enter your choice (1-4): 1

Enter student name: sagar

Enter grade: A+

Added sagar with grade A+.

Choose an option:

1. Add a new student and grade

2. Update an existing student's grade

3. Print all student grades

4. Exit

Enter your choice (1-4): 2

Enter student name to update: David

Enter new grade: B+

Updated David's grade to B+.

Choose an option:

1. Add a new student and grade

2. Update an existing student's grade

3. Print all student grades

4. Exit

Enter your choice (1-4): 3

Student Grades:

Alice: A

Bob: B

Charlie: C

David: B+

Eve: F

sagar: A+

Choose an option:

1. Add a new student and grade

2. Update an existing student's grade

3. Print all student grades

4. Exit

Enter your choice (1-4): 4

Exiting program.

1. **write\_to\_a\_file.py**

#open a file in write mode

file = open("example.txt", "w")

# Write some lines to the file

file.write("Hello, World!\n")

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

# Write multiple lines at once

file.writelines(["Line 1\n", "Line 2\n", "Line 3\n"])

# Close the file

file.close()

example.txt :

Hello, World!

This is a test file.

Line 1

Line 2

Line 3

1. **read\_from\_a\_file.py**

# opens a file in read mode

file = open("example.txt", "r")

# Read the entire file

print(file.read())

# Reset file pointer to the beginning

file.seek(0)

# Read the first 10 characters

print(file.read(10))

# Reset file pointer to the beginning

file.seek(0)

# Read the first line

print(file.readline())

# Reset file pointer to the beginning

file.seek(0)

# Read all lines into a list

print(file.readlines())

# Close the file

file.close()

PS D:\placement-notes\Tute Dude\Assignment2> python .\read\_from\_a\_file.py

Hello, World!

This is a test file.

Line 1

Line 2

Line 3

Hello, Wor

Hello, World!

['Hello, World!\n', 'This is a test file.\n', 'Line 1\n', 'Line 2\n', 'Line 3\n']