Assignment-2

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.

```
# Take score as input

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


# Check grade using if-else

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")
```

```
tej333@MSI:~/tude/Assignment-2$ python3 one.py
Enter your score: 57
Grade: F
tej333@MSI:~/tude/Assignment-2$ python3 one.py
Enter your score: 67
Grade: D
tej333@MSI:~/tude/Assignment-2$ python3 one.py
Enter your score: 77
Grade: C
tej333@MSI:~/tude/Assignment-2$ python3 one.py
Enter your score: 87
Grade: B
tej333@MSI:~/tude/Assignment-2$ python3 one.py
Enter your score: 97
Grade: A
tej333@MSI:~/tude/Assignment-2$
tej333@MSI:~/tude/Assignment-2$
```

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.

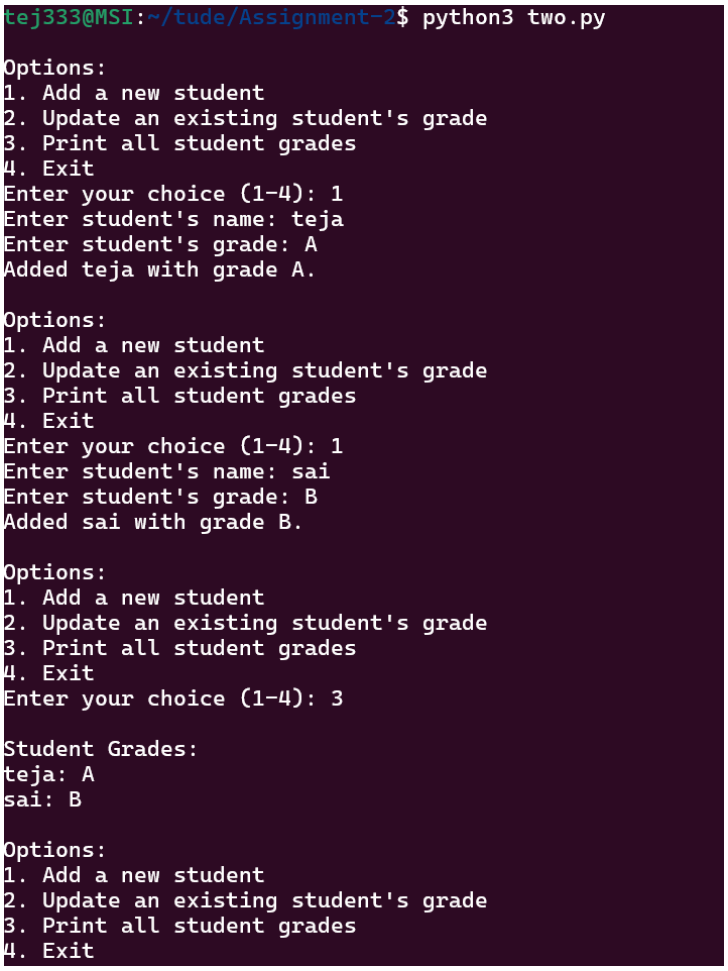
Update an existing student's grade.

Print all student grades.

```
# Initialize an empty dictionary for student grades
student_grades = {}

while True:
    print("\nOptions:")
    print("1. Add a new student")
```

```
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 == "1":
    # Add a new student
    name = input("Enter student's name: ")
    grade = input("Enter student's grade: ")
    if name in student_grades:
        print(f"{name} already exists. Use update option to change the grade.")
    else:
        student_grades[name] = grade
        print(f"Added {name} with grade {grade}.")

elif choice == "2":
    # Update existing student's grade
    name = input("Enter student's name to update: ")
    if name in student_grades:
        grade = input("Enter new grade: ")
        student_grades[name] = grade
        print(f"Updated {name}'s grade to {grade}.")
    else:
        print(f"{name} does not exist. Use add option to add the student first.")
```

```
elif choice == "3":
    # Print all student grades
    if student_grades:
        print("\nStudent Grades:")
        for name, grade in student_grades.items():
            print(f"{name}: {grade}")
    else:
        print("No student grades available.")

elif choice == "4":
    # Exit the program
    print("Exiting program...")
    break

else:
    print("Invalid choice. Please enter a number between 1 and 4.")
```



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.

Open (or create) a file in write mode

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

Write content to the file

file.write("Hello, this is a sample text.\n")

file.write("You can write multiple lines using write().\n")

file.write("Python makes file handling easy!\n")

Close the file

file.close()

print("Content written to my_file.txt successfully.")

```
tej333@MSI:~/tude/Assignment-2$ ls
one.py  two.py
tej333@MSI:~/tude/Assignment-2$ vi three.py
tej333@MSI:~/tude/Assignment-2$ ls
one.py  three.py  two.py
tej333@MSI:~/tude/Assignment-2$ python3 three.py
Content written to my_file.txt successfully.
tej333@MSI:~/tude/Assignment-2$ ls
my_file.txt  one.py  three.py  two.py
tej333@MSI:~/tude/Assignment-2$ cat my_file.txt
Hello, this is a sample text.
You can write multiple lines using write().
Python makes file handling easy!
tej333@MSI:~/tude/Assignment-2$
```

4. Read from a File

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

Open the file in read mode

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

Read the content of the file

content = file.read()

Print the content

print("File Content:\n")

print(content)

Close the file

file.close()

```
tej333@MSI:~/tude/Assignment-2$ vi five.py
tej333@MSI:~/tude/Assignment-2$ python3 five.py
File Content:

Hello, this is a sample text.
You can write multiple lines using write().
Python makes file handling easy!

tej333@MSI:~/tude/Assignment-2$
```