

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.

```
Welcome first.py ×
learning > python > first.py > ...
1 print("Grade System")
2 marks = int(input("enter the marks: "))
3 if marks >= 90:
4     Grade = "A"
5     print(Grade)
6 elif marks >= 80:
7     Grade = "B"
8     print(Grade)
9 elif marks >= 70:
10    Grade = "C"
11    print(Grade)
12 elif marks >= 60:
13    Grade = "D"
14    print(Grade)
15 else:
16    Grade = "F"
17    print(Grade)
```

```
PS C:\devops\learning\python> python .\first.py
Grade System
enter the marks: 68
D
PS C:\devops\learning\python> python .\first.py
Grade System
enter the marks: 90
A
PS C:\devops\learning\python> python .\first.py
Grade System
enter the marks: 35
F
PS C:\devops\learning\python> 
```

2 Student Grades

Create a dictionary where the keys are student names and the values are their grades.

```
20 # Task 2
21 Student_details = {}
22     "Student_A" : "A",
23     "Student_B" : "B",
24     "Student_C" : "C",
25     "Student_D" : "D"
26 }
27
```

Allow the user to:

Add a new student and grade.

```
28 print('Enter the student name')
29 Student_name = input("name: " )
30 Student_grade = input("grade: " )
31
32 Student_details[Student_name] = Student_grade
33
34 print("Please find the updated student details",Student_details)
35
36
```

Update an existing student's grade.

Print all student grades.

```
37 update_student =input("Enter the student name to update: ")
38 update_grade =input("Enter the grade to update: ")
39
40 if update_student in Student_details:
41     Student_details[update_student] = update_grade
42 else:
43     print("Not found")
44 print("Please find the updated details: ",Student_details)
```

Used dictionary and basic operations. Using if else:

Below highlighted output to add a new student in the list:

e.g. user enter's a student name: "XYZ" & the grade is "B++"

in the below updated student details: you can see the newly added student details as well.

```
PS C:\devops\learning\python> python .\first.py
Grade System
enter the marks: 99
A
Enter the student name
name: XYZ
grade: B++
Please find the updated student details {'Student_A': 'A', 'Student_B': 'B', 'Student_C': 'C', 'Student_D': 'D', 'XYZ': 'B++'}
Enter the student name to update: Student_A
Enter the grade to update: A+++
Please find the updated details: {'Student_A': 'A+++', 'Student_B': 'B', 'Student_C': 'C', 'Student_D': 'D', 'XYZ': 'B++'}
PS C:\devops\learning\python>
```

Below highlighted output to update a new student in the list:

e.g. user enter's a student name: "Student_A" & the grade is "A++"

in the updated student details: you can see the updated grade for the "Student_A"

details.

```
PS C:\devops\learning\python> python .\first.py
Grade System
enter the marks: 99
A
Enter the student name
name: XYZ
grade: B++
Please find the updated student details {'Student_A': 'A', 'Student_B': 'B', 'Student_C': 'C', 'Student_D': 'D', 'XYZ': 'B++'}
Enter the student name to update: Student_A
Enter the grade to update: A+++
Please find the updated details: {'Student_A': 'A+++', 'Student_B': 'B', 'Student_C': 'C', 'Student_D': 'D', 'XYZ': 'B++'}
PS C:\devops\learning\python>
```

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.

```
learning > python > file.py > ...
1 file = open("New_file.txt","w")
2
3 file.write("Hello World")
4 file.write("Hi from Python World")
5
6 file.close()
7
8 print("Content has been written successfully to New_file.txt ")
```

Output:

```
PS C:\devops\learning\python> python .\file.py
Content has been written successfully to New_file.txt
PS C:\devops\learning\python>
```

File created successfully and content also written in the newly created file.

```
learning > python > New_file.txt
1 Hello WorldHi from Python World
```

After adding '\n' in the code.

```
learning > python > file.py > ...
1  file = open("New_file.txt","w")
2
3  file.write("Hello World \n")
4  file.write("HEY!! \n")
5
6  file.close()
7
8  print("Content has been written successfully to New_file.txt ")
```

```
first.py  ×  file.py  ≡ New_file.txt  ×
learning > python > New_file.txt
1  Hello World
2  HEY!!
3  |
```

4. Read from a File

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

```
7
8  file_read = open("New_file.txt","r")
9  content = file_read.read()
10 print(content)
11 file_read.close()
12
13 # print("Content has been written successfully to New_file.txt ")
```

Output:

```
● PS C:\devops\learning\python> python .\file.py
Hello World
HEY!!
```