ASSIGNMENT-4

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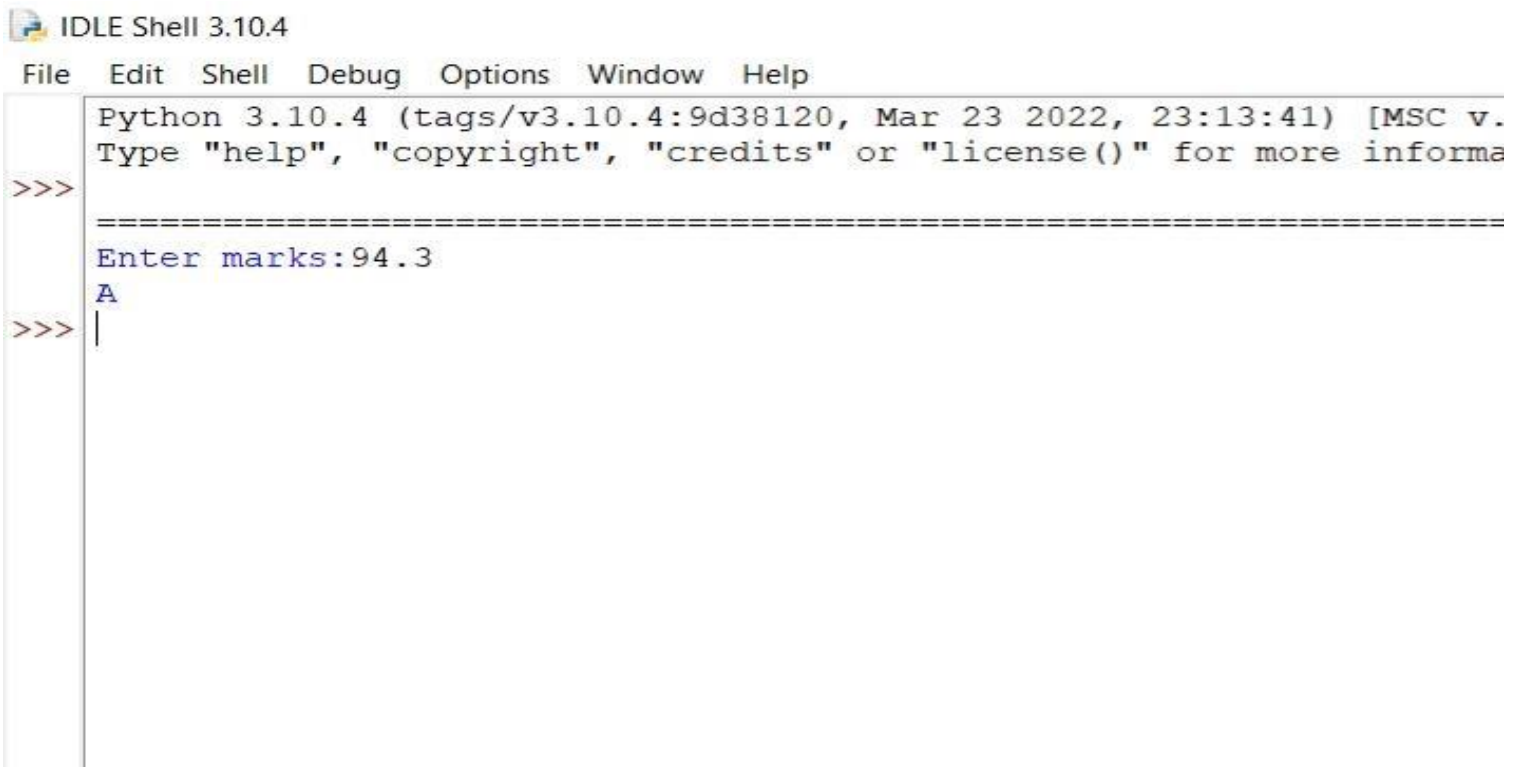
SID: 21102062

1. A school has following rules for grading system:

a. Below 25 - F

b. 25 to 45 - E

c. 45 to 50 - D

d. 50 to 60 - C

e. 60 to 80 – B

f. Above 80 – A

Ask user to enter marks and print the corresponding grade.

OUTPUT

```
IDLE Shell 3.10.4
File  Edit  Shell  Debug  Options  Window  Help
    Python 3.10.4 (tags/v3.10.4:9d38120, Mar 23 2022, 23:13:41) [MSC v.
    Type "help", "copyright", "credits" or "license()" for more informa
>>>
    ============================================================
    Enter marks:94.3
    A
>>>
```

2. A year is a leap year if it is divisible by 4, except that years divisible by 100 are not leap years unless they are also divisible by 400. Write a program that asks the user for a year and prints out whether it is a leap year or not.

OUTPUT:

IDLE Shell 3.10.4

File Edit Shell Debug Options Window Help

```
Python 3.10.4 (tags/v3.10.4:9d38120, Mar 23 2022, 23:13:41) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
==================== RESTART: C:/Users/HP/2 Question.py ====================
Enter any year:1700
1700 is not a leap year
>>>
==================== RESTART: C:/Users/HP/2 Question.py ====================
Enter any year:2024
2024 is a leap year
>>>
```

3. Write a multiplication game program for kids. The program should give the player ten randomly generated multiplication questions to do. After each, the program should tell them whether they got it right or wrong and what the correct answer is.

Question 1: 3 x 4 = 12

Right!

Question 2: 8 x 6 = 44

Wrong. The answer is 48.

...

...

Question 10: 7 x 7 = 49

OUTPUT

```
IDLE Shell 3.10.4
File  Edit  Shell  Debug  Options  Window  Help
    Python 3.10.4 (tags/v3.10.4:9d38120, Mar 23 2022, 23:13:41) [MSC v.1929 64 bit (AMD64)] on win32
    Type "help", "copyright", "credits" or "license()" for more information.
>>>
    ===================== RESTART: C:/Users/HP/3 Question.py =====================
    Question 1 :   4 * 1 =?
    Enter your answer: 4
    Right!
    Question 2 :   3 * 8 =?
    Enter your answer: 24
    Right!
    Question 3 :   7 * 4 =?
    Enter your answer: 28
    Right!
    Question 4 :   5 * 6 =?
    Enter your answer: 30
    Right!
    Question 5 :   5 * 2 =?
    Enter your answer: 10
    Right!
    Question 6 :   3 * 5 =?
    Enter your answer: 15
    Right!
    Question 7 :   2 * 0 =?
    Enter your answer: 2
    Wrong.The right answer is   0
    Question 8 :   9 * 9 =?
    Enter your answer: 81
    Right!
    Question 9 :   3 * 9 =?
    Enter your answer: 28
    Wrong.The right answer is   27
    Question 10 :   0 * 1 =?
    Enter your answer: 0
    Right!
>>>
```

4. A jar of Halloween candy contains an unknown amount of candy and if you can

guess exactly how much candy is in the bowl, then you win all the candy. You ask

the person in charge the following: If the candy is divided evenly among 5 people,

how many pieces would be left over? The answer is 2 pieces. You then ask about

dividing the candy evenly among 6 people, and the amount left over is 3 pieces.

Finally, you ask about dividing the candy evenly among 7 people, and the amount

left over is 2 pieces. By looking at the bowl, you can tell that there are less than

200 pieces. Write a program to determine how many pieces are in the bowl.

OUTPUT

IDLE Shell 3.10.4

File Edit Shell Debug Options Window Help

```
Python 3.10.4 (tags/v3.10.4:9d38120, Mar 23 2022, 23:13:41) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
==================== RESTART: C:/Users/HP/4 Question.py ====================
177 candies are in the bowl!
>>>
```