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Subject : Python

Assignment\_4

Ans\_1.

```
1 print("Grading system of a school!")
2
3 #taking input from user
4 marks = int(input("Enter your marks obtained( out of 100): "))
5
6 #if-elif loop is used here to print grade according to marks obtained.
7 if marks < 25:
8     print("Your Grade is: F")
9 elif 25 <= marks <= 45:
10    print("Your Grade is: E")
11 elif 45 < marks <= 50:
12    print("Your Grade is: D")
13 elif 50 < marks <= 60:
14    print("Your Grade is: C")
15 elif 60 < marks <= 80:
16    print("Your Grade is: B")
17 elif 80 < marks < 100:
18    print("Your Grade is: A")
19
```

```
PS D:\Python\Assignment 4> Python Assignment_4_Q1.py
Grading system of a school!
Enter your marks obtained( out of 100): 60
Your Grade is: C
PS D:\Python\Assignment 4> Python Assignment_4_Q1.py
Grading system of a school!
Enter your marks obtained( out of 100): 90
Your Grade is: A
PS D:\Python\Assignment 4> Python Assignment_4_Q1.py
Grading system of a school!
Enter your marks obtained( out of 100): 76
Your Grade is: B
PS D:\Python\Assignment 4>
```

Ans\_2.

```
1  #Taking input from user
2  year = int(input("\nEnter any Year:"))
3
4  #if-elif loop is used here to find the leap year.
5  if year%4 == 0 and year%100 !=0:
6      print(year, "is a Leap Year")
7  elif year%400 ==0:
8      print(year, "is a Leap Year")
9  else:
10     print(year, "is not an Leap Year")
11
```

```
PS D:\Python\Assignment 4> python .\Assignment_4_Q2.py
Enter any Year:2022
2022 is not an Leap Year
PS D:\Python\Assignment 4> python .\Assignment_4_Q2.py
Enter any Year:2000
2000 is a Leap Year
PS D:\Python\Assignment 4> python .\Assignment_4_Q2.py
Enter any Year:2100
2100 is not an Leap Year
PS D:\Python\Assignment 4>
```

Ans\_3.

```
1 import random
2
3 print("\nMultiplication Game","\nThere will be 10 questions.", "\n\nStarting...")
4
5 # Number of trials of game
6 i=1
7 while i <=10:      # Loop will continue till 10th trial of question
8     x = random.randint(1, 9)
9     y = random.randint(1, 9)
10    print("Question-",i,":", x, "*", y)
11    r = int(input("Enter your result:")) # r is the result to be entered by user
12    if r == x*y:
13        print("Right!")
14    else:
15        print("Wrong!", "The correct answer is:", x*y)
16    i+= 1
17
```

```
PS D:\Python\Assignment 4> python .\Assignment_4_Q3.py
```

```
Multiplication Game
```

```
There will be 10 questions.
```

```
Starting...
```

```
Question- 1 : 9 * 7
```

```
Enter your result:63
```

```
Right!
```

```
Question- 2 : 2 * 4
```

```
Enter your result:8
```

```
Right!
```

```
Question- 3 : 3 * 3
```

```
Enter your result:9
```

```
Right!
```

```
Question- 4 : 8 * 7
```

```
Enter your result:56
```

```
Right!
```

```
Question- 5 : 7 * 2
```

```
Enter your result:2
```

```
Wrong! The correct answer is: 14
```

```
Question- 6 : 3 * 5
```

```
Enter your result:55
```

```
Wrong! The correct answer is: 15
```

```
Question- 7 : 3 * 1
```

```
Enter your result:3
```

```
Right!
```

```
Question- 8 : 4 * 8
```

```
Enter your result:32
```

```
Right!
```

```
Question- 9 : 1 * 8
```

```
Enter your result:3
```

```
Wrong! The correct answer is: 8
```

```
Question- 10 : 3 * 5
```

```
Enter your result:5
```

```
Wrong! The correct answer is: 15
```

```
PS D:\Python\Assignment 4>
```

Ans\_4.

```
1 print("\n")
2 for x in range(200):
3     if x % 5 == 2:
4         if x % 6 == 3:
5             if x % 7 == 2:
6                 print("There are total", x," candies in the bowl.")
7
```

```
PS D:\Python\Assignment 4> python .\Assignment_4_Q4.py
```

```
There are total 177 candies in the bowl.
```

```
PS D:\Python\Assignment 4>
```