```python
#Q1          SID-21107052
#python program for finding grade of student
marks=int(input("enter marks of student : "))
#using conditions to check in grade range of marks
if marks<=80:
    if marks<=60:
        if marks<=50:
            if marks<=45:
                if marks<=25:
                    print("grade is F")
                else:
                    print("grade is E")
            else:
                print("grade is D")
        else:
            print("grade is C")
    else:
        print("grade is B")
else:
    print("grade is A")
```

input

```
enter marks of student : 63
grade is B


...Program finished with exit code 0
Press ENTER to exit console.
```

```python
#Q2          SID-21107052
#python program for checking leap year
#asking user for input year
a=int(input("enter the year : "))
#condition for checking if leap year or not according to conditions given
if a%4==0:
    if a%100==0:
        if a%400==0:
            print(a,"is leap year")
        else:
            print(a, " is not a leap year")
    else:
        print(a,"is a leap year")
else:
    print(a,"is not a leap year")

```

input

```
enter the year : 2020
2020 is a leap year


...Program finished with exit code 0
Press ENTER to exit console.
```

```python
#Q3          SID-21107052
#python program for creating mutiplication quiz
#import random library
import random

#defining a function to check answer
def main():
  print(a ,"*" ,b , "=")
  ans=int(input("answer"))
  if ans==(a*b):
    print("Right")
  else:
    print("wrong")

#using loop to create random questions then checking using function
i=0
while i<=10:
  a=random.randint(1,10)
  b=random.randint(1,10)
  main()
  i=1+i
```

Input

Input

```
4 * 3 =
answer12
Right
6 * 6 =
answer36
Right
5 * 4 =
answer20
Right
1 * 8 =
answer6
wrong
5 * 5 =
answer34
wrong
6 * 8 =
answer48
Right
1 * 4 =
answer4
Right
4 * 1 =
answer4
Right
7 * 7 =
answer49
Right
4 * 8 =
answer32
Right
5 * 1 =
answer5
Right


...Program finished with exit code 0
Press ENTER to exit console.
```

```python
#Q4         SID-21107052
#python program for finding required candies
#giving initial value for creating loop
candies=0
#using loop to check all numbers till 200
while candies <= 200:
    #using conditions given
    if candies%5==2:
        if candies%6==3:
            if candies%7==2:
                #printing the required number of candies
                print("no. of candies is : " , candies)
                break
            else:
                candies= candies + 1
        else:
            candies= candies + 1
    else:
        candies= candies + 1

```

input

```
no. of candies is :  177


...Program finished with exit code 0
Press ENTER to exit console.
```