Started on	Saturday, 16 August 2025, 9:22 PM
State	Finished
Completed on	Saturday, 16 August 2025, 9:54 PM
Time taken	32 mins 3 secs
Marks	5.00/5.00
Grade	**100.00** out of 100.00

Question 1 | Correct Mark 1.00 out of 1.00

Samantha is a diligent math student who is exploring the world of programming. She is learning Java and has recently studied conditional statements. One day, her teacher gives her an interesting problem to solve, that takes a number as input and checks whether it is a multiple of 5 or 7.

Help her to complete the task.

Input Format :

The input consists of a single integer **N,** representing the number to be checked.

Output Format :

If the number is a multiple of 5 but not 7, the output prints "N is a multiple of 5".

If the number is a multiple of 7, the output prints "N is a multiple of 7".

Otherwise the output prints "N is neither multiple of 5 nor 7" where N is an entered integer.

For example:

Input	Result
10	10 is a multiple of 5
21	21 is a multiple of 7
37	37 is neither multiple of 5 nor 7

Answer: (penalty regime: 0 %)

```
n=int(input())
if n%5==0:
    print(n,'is a multiple of 5')
elif n%7==0:
    print(n,'is a multiple of 7')
else:
    print(n,'is neither multiple of 5 nor 7')
```

	Input	Expected	Got	
✔	10	10 is a multiple of 5	10 is a multiple of 5	✔
✔	21	21 is a multiple of 7	21 is a multiple of 7	✔
✔	37	37 is neither multiple of 5 nor 7	37 is neither multiple of 5 nor 7	✔
✔	8	8 is neither multiple of 5 nor 7	8 is neither multiple of 5 nor 7	✔
✔	56	56 is a multiple of 7	56 is a multiple of 7	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question 2 | Correct Mark 1.00 out of 1.00

Ravi wants to estimate the total utility bill for a household based on the consumption of electricity, water, and gas.

Write a program to calculate the total bill using the following criteria:

1. The cost per unit for electricity is 0.12, for water is 0.05, and for gas is 0.08.
2. A discount is applied to the total cost based on the following conditions:
3. If the total cost is 100 or more, a 10% discount is applied.
4. If the total cost is between 50 and 99.99, a 5% discount is applied.
5. No discount is applied if the total cost is less than 50.

The program should output the total bill after applying the discount with two decimal places.

Input Format :

The input consists of three double values, representing the number of units consumed for electricity, water, and gas respectively.

Output Format :

The output prints a double value, representing the total bill after applying the discount, formatted to two decimal places.

For example:

Input	Result
1000.0 200.0 100.0	124.20
500.0 30.0 20.0	59.95
120.0 70.0 45.0	21.50

Answer: (penalty regime: 0 %)

```
e=float(input())
w=float(input())
g=float(input())
er=0.12
wr=0.05
gr=0.08
total=(e*er)+(w*wr)+(g*gr)
if total>=100:
    dis=0.10
elif total>=50:
    dis=0.05
else:
    dis=0.0
final=total*(1-dis)
print(f"{final:.2f}")

```

	Input	Expected	Got	
✔	1000.0 200.0 100.0	124.20	124.20	✔
✔	500.0 30.0 20.0	59.95	59.95	✔
✔	120.0 70.0 45.0	21.50	21.50	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question 3 | Correct Mark 1.00 out of 1.00

Alice, an insurance agent, needs a program to calculate the insurance premium for her clients based on their age and health condition.

The premium amount is determined by the following rules:

1. If the client's age is between 18 and 30 years:
2. 'excellent' health condition: 500.0
3. 'good' health condition: 700.0
4. Any other health condition: 900.0
5. If the client's age is between 31 and 50 years:
6. 'excellent' health condition: 700.0
7. 'good' health condition: 900.0
8. Any other health condition: 1100.0

Write a program that takes the age and health condition of a client as input and outputs the corresponding insurance premium.

Input Format :

The first line of input contains an integer representing the age of the client.

The second line contains a string representing the health condition of the client.

Output Format :

The output prints a double value, representing the insurance premium.

For example:

Input	Result
25 excellent	500.0
31 good	900.0
41 poor	1100.0

Answer: (penalty regime: 0 %)

```
age=int(input())
he=input()
pre=0.0
if 18<=age<=30:
    if he=='excellent':
        pre=500.0
    elif he =='good':
        pre=700.0
    else:
        pre=900.0

elif 31<=age<=50:
    if he=='excellent':
        pre=700.0
    elif he=='good':
        pre=900.0
    else:
        pre=1100.0

print(pre)
```

	Input	Expected	Got	
✔	25 excellent	500.0	500.0	✔
✔	31 good	900.0	900.0	✔
✔	41 poor	1100.0	1100.0	✔
✔	50 good	900.0	900.0	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question 4 | Correct Mark 1.00 out of 1.00

Bruce is working on a task that involves manipulating integers. He needs to rotate the digits of an integer to the right by one position.

Write a program to help Bruce accomplish this task using a do-while loop.

Input Format :

The input consists of a single integer **N.**

Output Format :

The output prints the given integer with its digits rotated to the right by one position.

For example:

Input	Result
647	764

Answer: (penalty regime: 0 %)

```
n= int(input())
s= str(n)
while True:
    rot=s[-1]+s[:-1]
    break
print(int(rot))

```

	Input	Expected	Got	
✔	647	764	764	✔
✔	78436	67843	67843	✔
✔	82644	48264	48264	✔
✔	62734	46273	46273	✔
✔	2836	6283	6283	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question 5 | Correct Mark 1.00 out of 1.00

Akash is tasked with developing a program that calculates and categorizes blood pressure based on the given systolic and diastolic readings.

The program should use the following classifications:

1. Low Blood Pressure: Systolic < 90 mm Hg or Diastolic < 60 mm Hg
2. Normal Blood Pressure: Systolic ≤ 120 mm Hg and Diastolic ≤ 80 mm Hg
3. Prehypertension: Systolic ≤ 140 mm Hg and Diastolic ≤ 90 mm Hg
4. Stage 1 Hypertension: Systolic ≤ 160 mm Hg and Diastolic ≤ 100 mm Hg
5. Stage 2 Hypertension: Otherwise

Write a program to assist Akash in computing and classifying blood pressure levels based on input readings.

Input Format :

The input consists of two space-separated integers, representing the systolic blood pressure value **S** and diastolic blood pressure value **D,** respectively.

Output Format :

The output displays "Blood Pressure Category: " followed by the blood pressure category based on the provided input.

Refer to the sample output for the exact text and format.

For example:

Input	Result
50 85	Blood Pressure Category: Low Blood Pressure
112 70	Blood Pressure Category: Normal Blood Pressure

Answer: (penalty regime: 0 %)

```
sys=int(input())
dia=int(input())
if sys<90 or dia <60:
    cat='Low Blood Pressure'
elif sys<=120 and dia<=80:
    cat='Normal Blood Pressure'
elif sys<=140 and dia<=90:
    cat='Prehypertension'
elif sys<=160 and dia<=100:
    cat="Stage 1 Hypertension"
else:
    cat='Stage 2 Hypertension'
print('Blood Pressure Category:',cat)

```

	Input	Expected	Got	
✔	50 85	Blood Pressure Category: Low Blood Pressure	Blood Pressure Category: Low Blood Pressure	✔
✔	112 70	Blood Pressure Category: Normal Blood Pressure	Blood Pressure Category: Normal Blood Pressure	✔
✔	135 86	Blood Pressure Category: Prehypertension	Blood Pressure Category: Prehypertension	✔
✔	145 98	Blood Pressure Category: Stage 1 Hypertension	Blood Pressure Category: Stage 1 Hypertension	✔
✔	170 110	Blood Pressure Category: Stage 2 Hypertension	Blood Pressure Category: Stage 2 Hypertension	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.