

Rajalakshmi Engineering College

# PYTHON MOODLE CODES:

## WEEK 4

[CS23231]

G. Meenakshi

231501097

AIML-B

First year

Week4\_Coding: Attempt review - Google Chrome

Not secure 118.185.187.137/moodle/mod/quiz/review.php?attempt=115663&cmid=1064

RAJALAKSHMI ENGINEERING COLLEGE REC-OCATS-1

Show one page at a time

Finish review

Grade 100.00 out of 100.00

Question 1  
Correct  
Mark 1.00 out of 1.00  
Flag question

Write a program to find the sum of the series  $1 + 11 + 111 + 1111 + \dots + n$  terms ( $n$  will be given as input from the user and sum will be the output)

Sample Test Cases

Test Case 1

Input  
4

Output  
1234

Test Case 2

Input  
6

Output  
123456

Answer: (penalty regime: 0 %)

```
1 n=int(input())
2 num=1
3 sum=0
4 for i in range(1,n+1):
5     sum=sum+num
6     num=(num*10)+1
7 print(sum)
```

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Correct  
Marks for this submission: 1.00/1.00.

	Input	Expected	Got	
✓	4	1234	1234	✓
✓	6	123456	123456	✓

Passed all tests! ✓

Question 2  
Correct  
Mark 1.00 out of 1.00  
Flag question

Write a program to find the count of non-repeated digits in a given number  $N$ . The number will be passed to the program as an input of type int.

Assumption: The input number will be a positive integer number  $\geq 1$  and  $\leq 25000$ .

Some examples are as below.

If the given number is 292, the program should return 1 because there is only 1 non-repeated digit '9' in this number

If the given number is 1015, the program should return 2 because there are 2 non-repeated digits in this number, '1', and '5'.

If the given number is 108, the program should return 3 because there are 3 non-repeated digits in this number, '1', '0', and '8'.

If the given number is 22, the function should return 0 because there are NO non-repeated digits in this number.

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Question 2  
Correct  
Mark 1.00 out of 1.00  
Flag question

Write a program to find the count of non-repeated digits in a given number N. The number will be passed to the program as an input of type int.

Assumption: The input number will be a positive integer number  $\geq 1$  and  $\leq 25000$ .

Some examples are as below.

If the given number is 292, the program should return 1 because there is only 1 non-repeated digit '9' in this number

If the given number is 1015, the program should return 2 because there are 2 non-repeated digits in this number, '0' and '5'.

If the given number is 108, the program should return 3 because there are 3 non-repeated digits in this number, '1', '0', and '8'.

If the given number is 22, the function should return 0 because there are NO non-repeated digits in this number.

For example:

Input	Result
292	1
1015	2
108	3
22	0

Answer: (penalty regime: 0 %)

```
1 x=input()
2 y=list(x)
3 n=[]
4 for i in y:
5     c=y.count(i)
6     if c>1:
7         if n.count(x)==0:
8             n.append(i)
```

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RAJALAKSHMI ENGINEERING COLLEGE REC-OCATS-1

```
1 x=input()
2 y=list(x)
3 n=[]
4 for i in y:
5     c=y.count(i)
6     if c>1:
7         if n.count(x)==0:
8             n.append(i)
9 d=set(n)
10 e=set(y)
11 f=e-d
12 g=list(f)
13 print(len(g))
```

	Input	Expected	Got	
✓	292	1	1	✓
✓	1015	2	2	✓
✓	108	3	3	✓
✓	22	0	0	✓

Passed all tests! ✓

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**Question 3**  
Correct  
Mark 1.00 out of 1.00  
Flag question

A Number is said to be Disarium number when the sum of its digit raised to the power of their respective positions becomes equal to the number itself. Write a program to print number is Disarium or not.

Input Format:  
Single Integer Input from stdin.

Output Format:  
Yes or No.

Example Input:  
175

Output:  
Yes

Explanation  
 $1^1 + 7^2 + 5^3 = 175$

Example Input:  
123

Output:  
No

For example:

Input	Result
175	Yes
123	No

Answer: (penalty regime: 0 %)

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**Question 3**  
Correct  
Mark 1.00 out of 1.00  
Flag question

123

Output:  
No

For example:

Input	Result
175	Yes
123	No

Answer: (penalty regime: 0 %)

```
1 x=int(input())
2 l=list(str(x))
3 s=0
4 for i in range(len(l)):
5     a=l[i]
6     a=int(a)
7     s=s+a**(i+1)
8 if(s==x):
9     print("Yes")
10 else:
11     print("No")
```

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Answer: (penalty regime: 0 %)

```
1 x=int(input())
2 l=list(str(x))
3 s=0
4 for i in range(len(l)):
5     a=l[i]
6     a=int(a)
7     s=s+a*(i+1)
8 if(s==x):
9     print("Yes")
10 else:
11     print("No")
```

	Input	Expected	Got
✓	175	Yes	Yes ✓
✓	123	No	No ✓

Passed all tests! ✓

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Correct

Marks for this submission: 1.00/1.00.

Question 4

Correct

Mark 1.00 out of 1.00

Flag question

Determine the factors of a number (i.e., all positive integer values that evenly divide into a number).

For example:

Input	Result
20	1 2 4 5 10 20

Answer: (penalty regime: 0 %)

```
1 n=int(input())
2 for i in range(1, n+1):
3     if n%i==0:
4         print(i, end=' ')
```

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ENG IN 01:06 10-06-2024

	Input	Expected	Got	
✓	20	1 2 4 5 10 20	1 2 4 5 10 20	✓
✓	5	1 5	1 5	✓
✓	13	1 13	1 13	✓

Passed all tests! ✓

**Correct**

Marks for this submission: 1.00/1.00.

Question 5  
Correct

Given an integer N, check whether N the given number can be made a perfect square after adding 1 to it.

Input Format:

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Search

ENG IN 01:06 10-06-2024

Question 5  
Correct  
Mark: 1.00 out of 1.00  
Flag question

Given an integer N, check whether N the given number can be made a perfect square after adding 1 to it.

Input Format:  
Single integer input.

Output Format:  
Yes or No.

Example Input:  
24

Output:  
Yes

Example Input:  
26

Output:  
No

For example:

Input	Result
24	Yes

Answer: (penalty regime: 0 %)

```
1 import math
2 x=int(input())
3 y=x+1
4 z=math.sqrt(y)
5 if z.is_integer():
```

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Input	Expected	Got
24	Yes	Yes
26	No	No

Answer: (penalty regime: 0 %)

```
1 import math
2 x=int(input())
3 y=x-1
4 z=math.sqrt(y)
5 if z.is_integer():
6     print("Yes")
7 else:
8     print("No")
```

Input	Expected	Got
24	Yes	Yes
26	No	No

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Question 6  
Correct  
Mark 1.00 out of 1.00  
[Flag question](#)

Write a program to find the count of unique digits in a given number N. The number will be passed to the program as an input of type int.  
Assumption: The input number will be a positive integer number  $\geq 1$  and  $\leq 25000$ .  
For e.g.  
If the given number is 292, the program should return 2 because there are only 2 unique digits '2' and '9' in this number  
If the given number is 1015, the program should return 3 because there are 3 unique digits in this number, '1', '0', and '5'.

For example:

Input	Result
292	2
1015	3

Answer: (penalty regime: 0 %)

```
1 n=input()
2 here=[]
3 for i in n:
4     if i in here:
5         pass
6     else:
7         here.append(i)
8 print(len(here))
```

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RAJALAKSHMI ENGINEERING COLLEGE REC-OCATS-1

	Input	Expected	Got	
✓	292	2	2	✓
✓	1015	3	3	✓
✓	123	3	3	✓

Passed all tests! ✓

**Correct**  
Marks for this submission: 1.00/1.00.

Question 7  
Correct  
Mark 1.00 out of 1.00  
[Flag question](#)

Write a program to return the nth number in the fibonacci series.  
The value of N will be passed to the program as input.  
NOTE: Fibonacci series looks like –  
0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, ... and so on.  
i.e. Fibonacci series starts with 0 and 1, and continues generating the next number as the sum of the previous two numbers.  
• first Fibonacci number is 0,  
• second Fibonacci number is 1,

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Question 7  
Correct  
Mark 1.00 out of 1.00  
[Flag question](#)

Write a program to return the nth number in the fibonacci series.  
The value of N will be passed to the program as input.  
NOTE: Fibonacci series looks like –  
0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, ... and so on.  
i.e. Fibonacci series starts with 0 and 1, and continues generating the next number as the sum of the previous two numbers.  
• first Fibonacci number is 0,  
• second Fibonacci number is 1,  
• third Fibonacci number is 1,  
• fourth Fibonacci number is 2,  
• fifth Fibonacci number is 3,  
• sixth Fibonacci number is 5,  
• seventh Fibonacci number is 8, and so on.

**For example:**

Input	Result
1	0
4	2
7	8

**Answer:** (penalty regime: 0 %)

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Answer: (penalty regime: 0 %)

```
1 n=int(input())
2 a=0
3 b=1
4 c=1
5 nxt=0
6 for i in range(n-3):
7     nxt=b+c
8     b=c
9     c=nxt
10 print(nxt)
```

	Input	Expected	Got	
✓	1	0	0	✓
✓	4	2	2	✓
✓	7	8	8	✓

Passed all tests! ✓

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Question 8  
Correct  
Mark: 1.00 out of 1.00  
Flag question

Given a positive integer N, check whether it can be represented as a product of single digit numbers.

Input Format:  
Single Integer input.

Output Format:  
Output displays Yes if condition satisfies else prints No.

Example Input:  
14  
Output:  
Yes

Example Input:  
13  
Output:  
No

Answer: (penalty regime: 0 %)

```
1 n=int(input())
2 x=0
3 for i in range(n):
4     for j in range(n):
5         if i*j==n:
6             x+=1
7 if x>=1:
8     print("Yes")
9 else:
10    print("No")
```

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```
7 - if x>=1:
8     print("Yes")
9 - else:
10    print("No")
```

	Input	Expected	Got	
✓	14	Yes	Yes	✓
✓	13	No	No	✓

Passed all tests! ✓

**Correct**  
Marks for this submission: 1.00/1.00.

Question 9  
Correct  
Mark 1.00 out of 1.00

Write a program that finds whether the given number N is Prime or not.  
If the number is prime, the program should return 2 else it must return 1.

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Question 9  
Correct  
Mark 1.00 out of 1.00  
Flag question

Write a program that finds whether the given number N is Prime or not.  
If the number is prime, the program should return 2 else it must return 1.  
Assumption:  $2 \leq N \leq 5000$ , where N is the given number.  
Example1: if the given number N is 7, the method must return 2  
Example2: if the given number N is 10, the method must return 1

For example:

Input	Result
7	2
10	1

Answer: (penalty regime: 0 %)

```
1 a=int(input())
2 count=0
3 for j in range(2,a//2+1):
4     if(a%j==0):
5         break
6     else:
7         count+=1
8 if count>=1:
9     print(2)
10 else:
11    print(1)
```

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```
11 print(1)
```

	Input	Expected	Got	
✓	7	2	2	✓
✓	10	1	1	✓

Passed all tests! ✓

**Correct**  
Marks for this submission: 1.00/1.00.

Question 10  
Correct  
Mark 1.00 out of 1.00  
[Flag question](#)

Given a number N, find the next perfect square greater than N.  
Input Format:  
Integer input from stdin.  
Output Format:

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Question 10  
Correct  
Mark 1.00 out of 1.00  
[Flag question](#)

Given a number N, find the next perfect square greater than N.  
Input Format:  
Integer input from stdin.  
Output Format:  
Perfect square greater than N.  
Example Input:  
10  
Output:  
16

Answer: (penalty regime: 0 %)

```
1 import math
2 n=int(input())
3 for i in range(n):
4     if i*i>n:
5         print(i*i)
6         break
```

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	Input	Expected	Got	
✓	10	16	16	✓

Passed all tests! ✓

**Correct**  
Marks for this submission: 1.00/1.00.

[Finish review](#)

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