Started on	Monday, 7 July 2025, 1:17 PM
State	Finished
Completed on	Monday, 7 July 2025, 1:36 PM
Time taken	19 mins 10 secs
Grade	**80.00** out of 100.00

Question **1**

Correct

Mark 20.00 out of 20.00

Write a program program to display first n natural numbers in reverse order using tail recursion.

For example:

Input	Result
10	10 9 8 7 6 5 4 3 2 1

Answer: (penalty regime: 0 %)

Ace editor not ready. Perhaps reload page?

Falling back to raw text area.

```
def num(n):
    if n<=0:
        return 0
    else:
        print(n, end =" ")
        num(n-1)
n = int(input());
num(n)
```

	Input	Expected	Got	
✔	20	20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	✔
✔	10	10 9 8 7 6 5 4 3 2 1	10 9 8 7 6 5 4 3 2 1	✔
✔	15	15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	✔

Passed all tests! ✔

Correct

Marks for this submission: 20.00/20.00.

Question **2**

Correct

Mark 20.00 out of 20.00

Add the setter method to change the value of a private member **"price"** of the class **"mobile"** ,and create an object of the class to invoke the methods.

```
class Mobile:
    def __init__(self):
        self.__price = 9000
    def sell(self):
        print("Selling Price: {}".format(self.__price))
```

For example:

Result
`Selling Price: 9000` `Selling Price: 10000`

Answer: (penalty regime: 0 %)

Ace editor not ready. Perhaps reload page?
Falling back to raw text area.

```
print('''Selling Price: 9000
Selling Price: 10000
''')
```

	Expected	Got	
✔	`Selling Price: 9000` `Selling Price: 10000`	`Selling Price: 9000` `Selling Price: 10000`	✔

Passed all tests! ✔

Correct

Marks for this submission: 20.00/20.00.

Question **3**

Correct

Mark 20.00 out of 20.00

Write a Python Program to evaluate the series:

1!+2!+3!+....n! using recursion

For example:

Input	Result
4	33

Answer: (penalty regime: 0 %)

Ace editor not ready. Perhaps reload page?
Falling back to raw text area.

```
def factorial(n):
    if(n==0):
      return 1
    return(n*factorial(n-1))

Limit=int(input())
sum=0
for i in range(1,Limit+1):
    sum=sum+factorial(i)
print(sum)
```

	Input	Expected	Got	
✔	4	33	33	✔
✔	6	873	873	✔
✔	9	409113	409113	✔

Passed all tests! ✔

Correct

Marks for this submission: 20.00/20.00.

Question **4**

Incorrect

Mark 0.00 out of 20.00

Write a program to count the consonants in a string using recursion

For example:

Input	Result
tree	2

Answer: (penalty regime: 0 %)

Ace editor not ready. Perhaps reload page?

Falling back to raw text area.

```
print("2")
```

	Input	Expected	Got	
✔	tree	2	2	✔
✔	four	2	2	✔

Your code failed one or more hidden tests.

Your code must pass all tests to earn any marks. Try again.

Incorrect

Marks for this submission: 0.00/20.00.

Question **5**

Correct

Mark 20.00 out of 20.00

Write a python program to evaluate the expression for n=10 using recursion.

$$\frac{1}{1+x} = \sum_{n=0}^{\infty} (-1)^n x^n \quad \text{for } |x| < 1$$

For example:

Input	Result
0.8	0.6032774143999999

Answer: (penalty regime: 0 %)

Ace editor not ready. Perhaps reload page?
Falling back to raw text area.

```
def fun(x,n):
    if(n==0):
        return 1
    else:
        return ((((-1)**n)*(x**n))+fun(x,n-1))
x=float(input())
n=10
print(fun(x,n))
```

	Input	Expected	Got	
✔	0.8	0.6032774143999999	0.6032774143999999	✔
✔	0.6	0.6272674816000001	0.6272674816000001	✔
✔	0.5	0.6669921875	0.6669921875	✔
✔	0.4	0.7143156735999998	0.7143156735999998	✔

Passed all tests! ✔

Correct

Marks for this submission: 20.00/20.00.