

## question3

January 4, 2021

Create a non recursive function factorial() that takes an integer and returns its factorial value. Save the python file as .py and import the module and use the functions.

```
[1]: def factorial(n):  
    result = 1;  
    if(n < 0):  
        print("The factorial does not exist for negative numbers ")  
    elif(n==0):  
        print("The factorial of 0 is 1 ")  
    elif(n==1):  
        return 1  
    else:  
        for i in range(2, n + 1):  
            result = result * i;  
        return result;
```

```
[ ]:
```

# 1 q3

January 4, 2021

Create a non recursive function factorial() that takes an integer and returns its factorial value. Save the python file as .py and import the module and use the functions.

```
[1]: import factorial_definition  
  
factorial_definition.factorial(3)
```

```
[1]: 6
```

```
[2]: factorial_definition.factorial(5)
```

```
[2]: 120
```

```
[3]: factorial_definition.factorial(10)
```

```
[3]: 3628800 [ ]:
```

③ Create a non recursive function `factorial()` that takes an integer and returns its factorial value. Save the python file

```
def factorial(n):
```

```
    result = 1;
```

```
    if (n < 0):
```

```
        print("the factorial does not exist for negative numbers")
```

```
    elif (n == 0):
```

```
        print("the factorial of 0 is 1")
```

```
    elif (n == 1):
```

```
        return 1
```

```
    else:
```

```
        for i in range(2, n+1):
```

```
            result = result * i;
```

```
        return result;
```

```
import factorial_definition
```

```
factorial_definition.factorial(3)
```

```
factorial_definition.factorial(5)
```

```
factorial_definition.factorial(10)
```