https://github.com/ssardarabdullah

ABBOTTABAD UNIVERSITY OF SCIENCE & TECHNOLOGY ABBOTTABAD

Lab Task No # 02

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COURSE: OBJECT ORIENTED

PROGRAM BS/SC

SECTION : C

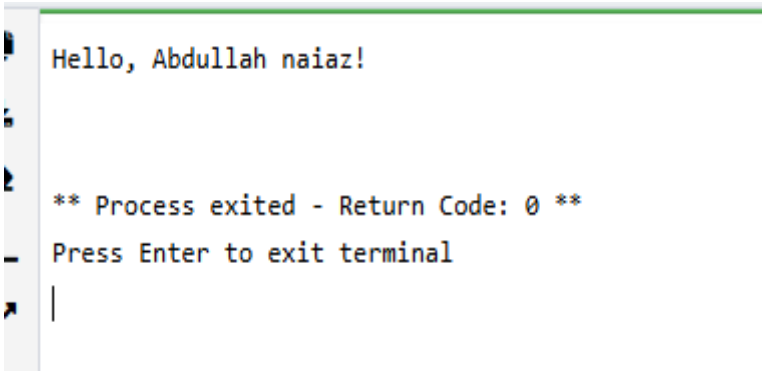
ROLL NO : F24– 1312

i-:

```
def hello_name(name):
    print(f"Hello, {name}!")

hello_name("Abdullah naiaz")
```

Output:



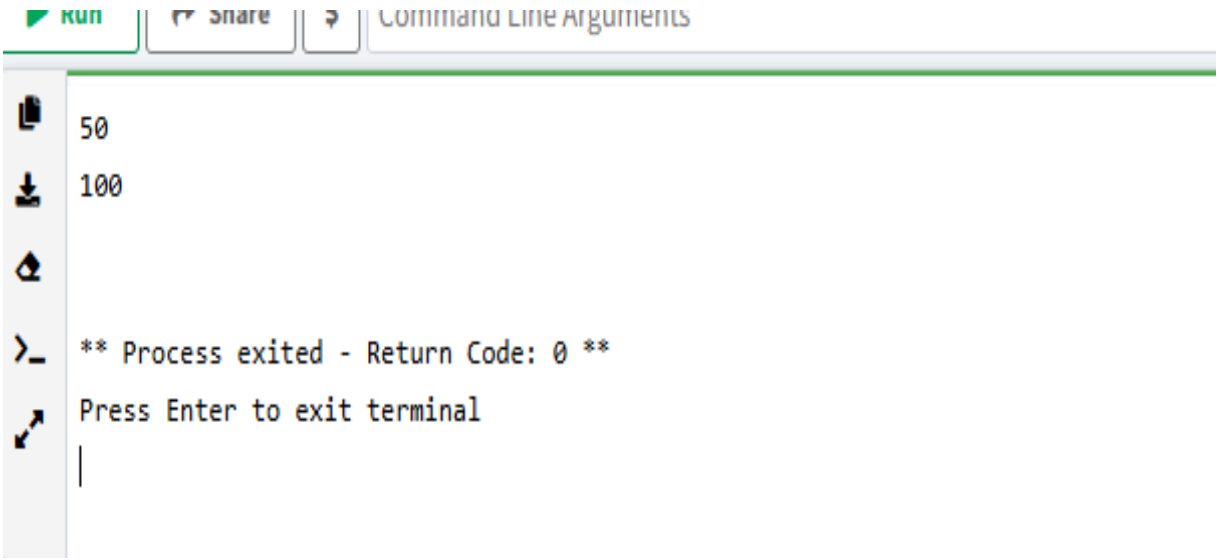
ii-:

```
File  Edit  Format  Run  Options  Window  Help
def calculate_area(length, width=10):
    return length * width

area1 = calculate_area(5)
area2 = calculate_area(5, 20)

print(area1)
print(area2)
```

Output:

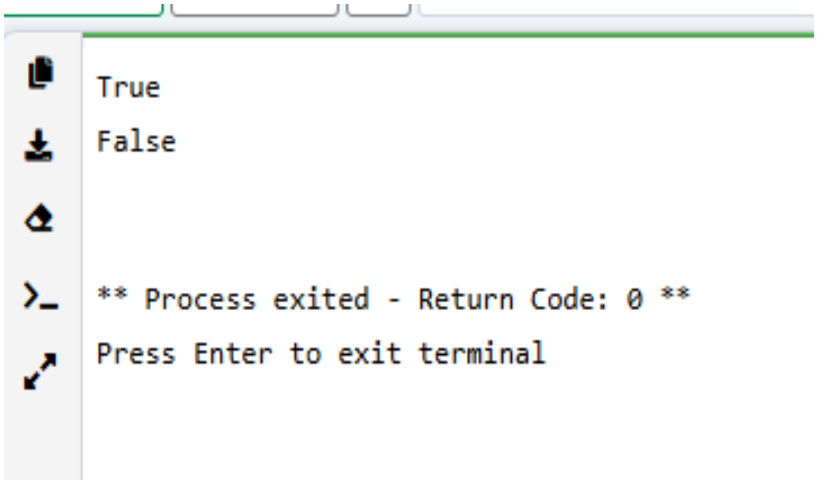


iii-:

```
def is_even(number):
    return number % 2 == 0


print(is_even(4))
print(is_even(7))
```

OUTPUT:

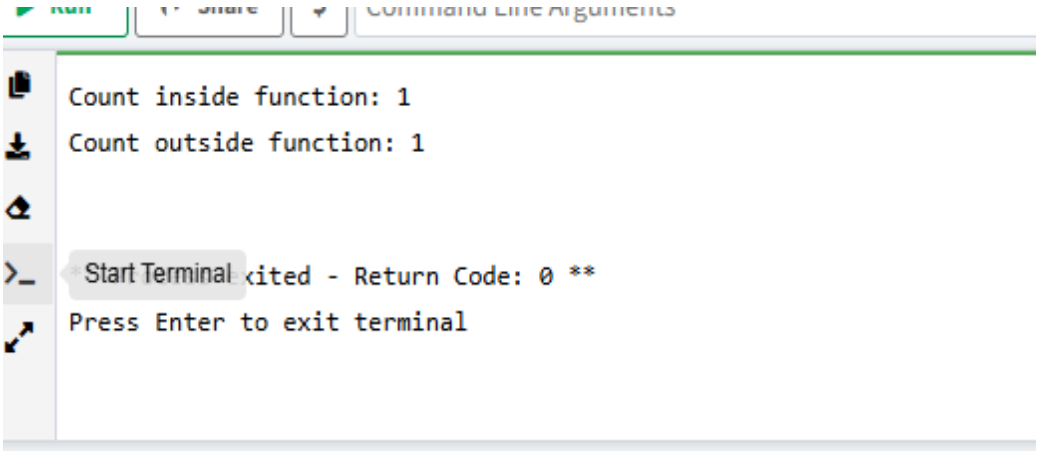


iv-:

```
count = 0

def increment_count():
    global count
    count += 1
    print("Count inside function:", count)
increment_count()
print("Count outside function:", count)
```

OUTPUT:



v-:

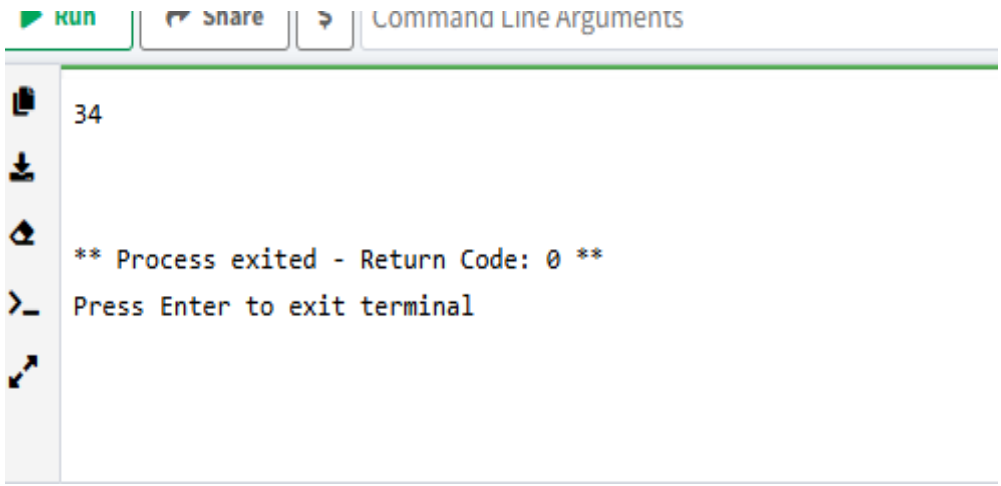
Input :

File Edit Format Run Options Window Help

```
def fibonacci(n):
    if n <= 0:
        return "Input must be a positive integer"
    elif n == 1:
        return 0
    elif n == 2:
        return 1
    return fibonacci(n - 1) + fibonacci(n - 2)

print(fibonacci(10))  # Output: 34
```

OUTPUT:



vi-:

```
is_even = lambda x: x % 2 == 0

print(is_even(4))
print(is_even(7))
```

OUTPUT:

```
True
False


** Process exited - Return Code: 0 **
Press Enter to exit terminal
```

vii-:

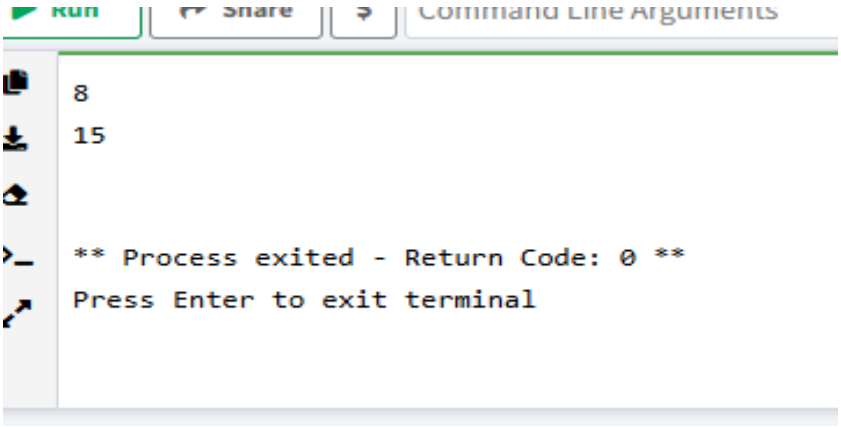
INPUT:

File Edit Format Run Options Window Help

```
def operate(func, a, b):
    return func(a, b)
add = lambda x, y: x + y
multiply = lambda x, y: x * y

print(operate(add, 5, 3))
print(operate(multiply, 5, 3))
```

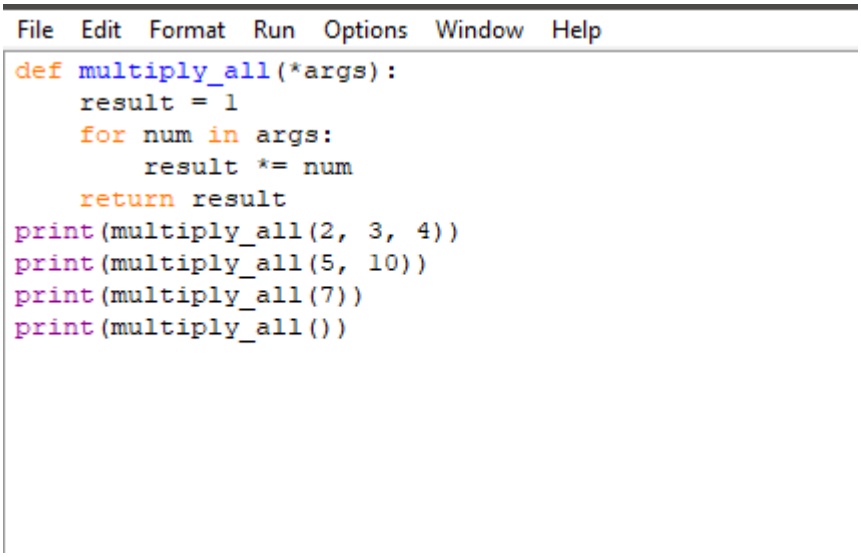
OUTPUT



viii:

their product

INPUT:



OUTPUT:

ix-:

INPUT:

```
def log_decorator(func):
    def wrapper(*args, **kwargs):
        print("Function called")
        return func(*args, **kwargs)
    return wrapper
@log_decorator
def say_hello():
```

OUTPUT:

```
Function called
Hello!


** Process exited - Return Code: 0 **
Press Enter to exit terminal
```