

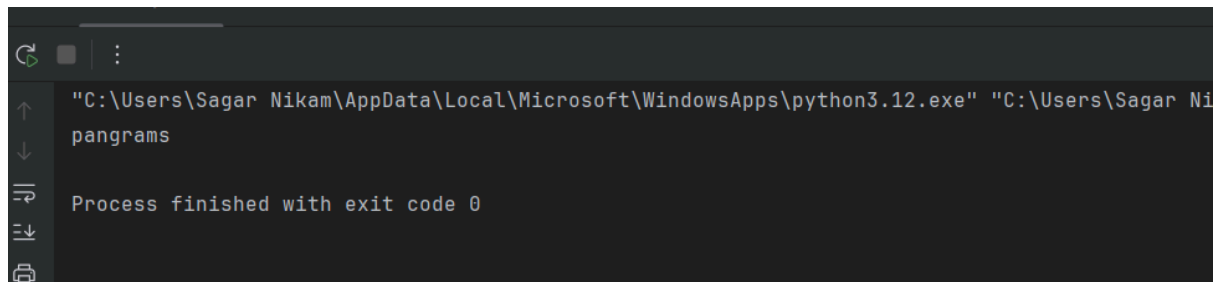
Q1.

```
string1 = "The quick brown fox jumps over the lazy dog"

def is_pangrams(s):
    s = s.lower()
    for ch in "abcdefghijklmnopqrstuvwxyz":
        if ch not in s:
            return "not pangram"
    return "pangrams"

print(is_pangrams(string1))
```

Output:



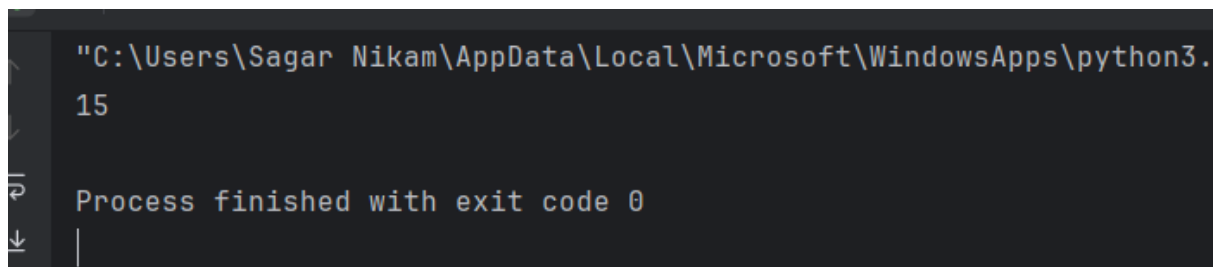
The screenshot shows a terminal window with a dark background. The command prompt shows the execution of a Python script: "C:\Users\Sagar Nikam\AppData\Local\Microsoft\WindowsApps\python3.12.exe" "C:\Users\Sagar Nikam\AppData\Local\Microsoft\WindowsApps\pangrams". The output of the script is "pangrams". Below the command, it says "Process finished with exit code 0".

Q2.

```
def sum_of_digits(n):
    total = 0
    while n > 0:
        total += n % 10
        n //= 10
    return total

print(sum_of_digits(12345))
```

Output:

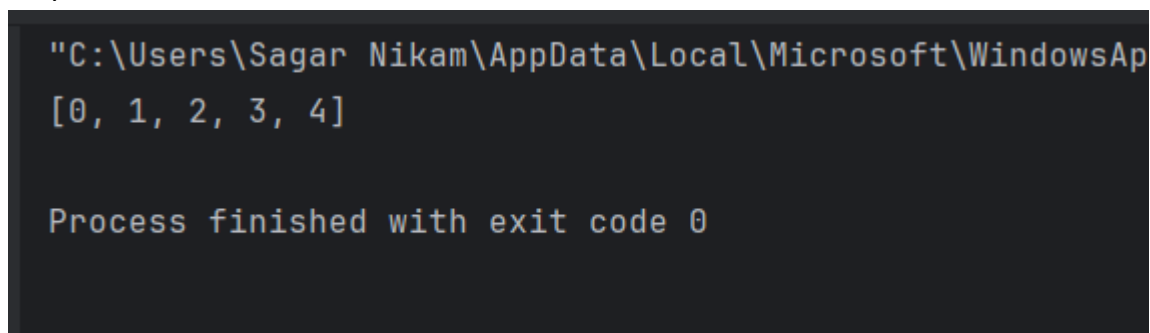


The screenshot shows a terminal window with a dark background. The command prompt shows the execution of a Python script: "C:\Users\Sagar Nikam\AppData\Local\Microsoft\WindowsApps\python3.12.exe" "C:\Users\Sagar Nikam\AppData\Local\Microsoft\WindowsApps\sum_of_digits.py". The output of the script is "15". Below the command, it says "Process finished with exit code 0".

Q3.

```
nums = (3,4,1,2,0)
print(sorted(nums))
```

Output:



The screenshot shows a terminal window with a dark background. The command prompt shows the execution of a Python script: "C:\Users\Sagar Nikam\AppData\Local\Microsoft\WindowsApps\python3.12.exe" "C:\Users\Sagar Nikam\AppData\Local\Microsoft\WindowsApps\sorted.py". The output of the script is "[0, 1, 2, 3, 4]". Below the command, it says "Process finished with exit code 0".

Q4.

```
def is_perfect(n):  
    if n <= 1:  
        return False  
    divisors_sum = 1  
    i = 2  
    while i * i <= n:  
        if n % i == 0:  
            divisors_sum += i  
            other = n // i  
            if other != i:  
                divisors_sum += other  
        i += 1  
    return divisors_sum == n  
  
print(is_perfect(6))  
print(is_perfect(28))  
print(is_perfect(12))
```

Output:

```
↑ "C:\Users\Sagar Nikam\AppData\Local\Microsoft\WindowsApp  
↓ True  
= True  
↩ False  
E ↓
```