

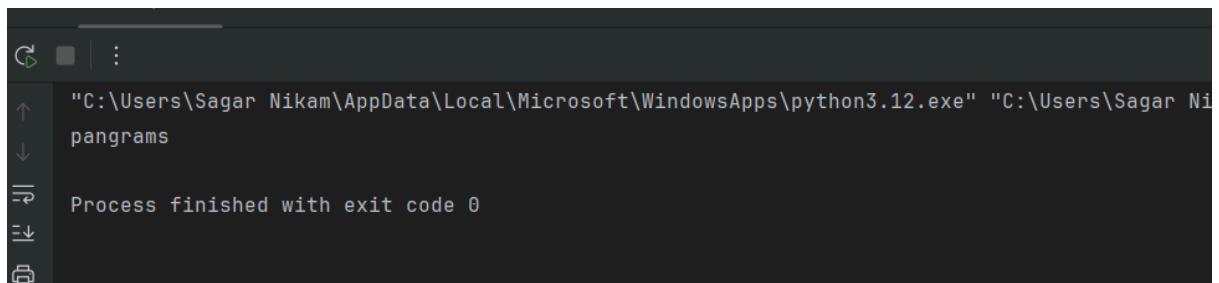
Q1.

```
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:



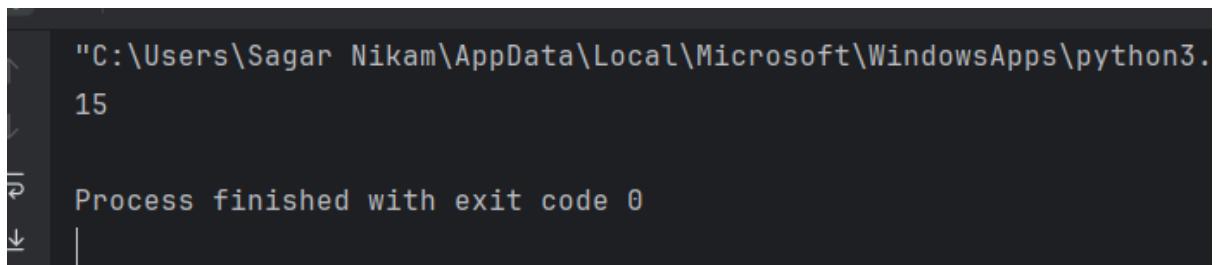
A screenshot of a terminal window. The command "C:\Users\Sagar Nikam\AppData\Local\Microsoft\WindowsApps\python3.12.exe" "C:\Users\Sagar Ni" is entered, followed by "pangrams". The output shows "Process finished with exit code 0".

Q2.

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

print(sum_of_digits(12345))
```

Output:

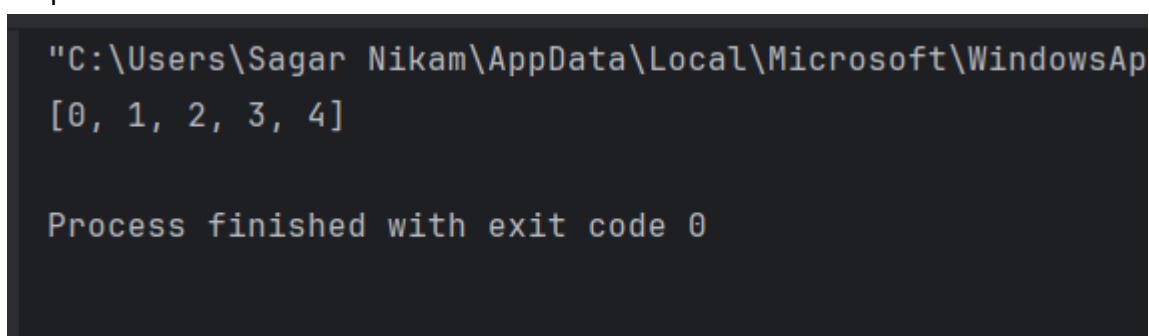


A screenshot of a terminal window. The command "C:\Users\Sagar Nikam\AppData\Local\Microsoft\WindowsApps\python3." is entered, followed by "15". The output shows "Process finished with exit code 0".

Q3.

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

Output:



A screenshot of a terminal window. The command "C:\Users\Sagar Nikam\AppData\Local\Microsoft\WindowsAp" is entered, followed by "[0, 1, 2, 3, 4]". The output shows "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\WindowsAppI
↓ True
↓ True
←→ False
↓
```