Programming Assignment-23

Question 1:

Ans.

```
def is_symmetrical(num):
    return str(num) == str(num)[::-1]


# Examples
print(is_symmetrical(7227))    # ➞ True
print(is_symmetrical(12567))   # ➞ False
print(is_symmetrical(44444444)) # ➞ True
print(is_symmetrical(9939))    # ➞ False
print(is_symmetrical(1112111)) # ➞ True
```

Question 2:

Ans.

```
def multiply_nums(numbers):
    nums = map(int, numbers.split(", "))
    result = 1
    for num in nums:
        result *= num
    return result


# Examples
print(multiply_nums("2, 3"))         # ➞ 6
print(multiply_nums("1, 2, 3, 4"))    # ➞ 24
print(multiply_nums("54, 75, 453, 0")) # ➞ 0
print(multiply_nums("10, -2"))        # ➞ -20
```

Question 3:

Ans.

```
def square_digits(num):
    return int(''.join(str(int(digit) ** 2) for digit in str(num)))


# Examples
print(square_digits(9119))  # → 811181
print(square_digits(2483))  # → 416649
print(square_digits(3212))  # → 9414
```

Question 4:

Ans.

```
def setify(lst):
    return sorted(set(lst))


# Examples
print(setify([1, 3, 3, 5, 5]))      # → [1, 3, 5]
print(setify([4, 4, 4, 4]))         # → [4]
print(setify([5, 7, 8, 9, 10, 15]))  # → [5, 7, 8, 9, 10, 15]
print(setify([3, 3, 3, 2, 1]))      # → [1, 2, 3]
```

Question 5:

Ans.

```
def mean(num):
    digits = [int(d) for d in str(num)]
    return sum(digits) // len(digits)


# Examples
```

```
print(mean(42))    # → 3
print(mean(12345)) # → 3
print(mean(666))   # → 6
```