# **Task 1.1**

## **Function Name:** multiplier\_check($intArray)

**Function Description:** The function takes two arrays of numbers as parameters and returns the number of values that are a multiplier of numbers (4, 6 or both as per requirement) in second array from first array.

**Test Feature:** Test thefunctionmultiplier\_check

### **Positive Scenarios:**

**Scenario 1:** Verify if array of valid whole numbers is entered as a parameter, it should accept the values and return multiplier of either 4 or 6 or both.

**Scenario 1.1**: When input array has only whole numbers  
 **Given** Function multiplier\_check is called  
 **When** User enters array of valid whole numbers like (1,4,6,7,8,10,16,19,18,20) as a parameter **Then** it should accept the values   
 **And** return multiplier of either 4 or 6 or both that is (4,6,8,16,18,20)

**Scenario 1.2:** When input is a single number   
 **Given** Function multiplier\_check is called  
 **When** User enters array with single number like (4) as a parameter **Then** it should accept the values   
 **And** result should be (4)

**Scenario 1.3**: When input is without any multiples of 4 or 6   
 **Given** Function multiplier\_check is called  
 **When** User enters array of whole numbers without any multiples of 4 or 6 like (1,2,3,5,7,10,14,22,115) as a parameter **Then** it should accept the values   
 **And** the result should be ()

**Scenario 2**Verify if array of negative whole numbers is entered as a parameter, it should accept the values and return multiplier of either 4 or 6 or both.

**Scenario 2.1:** When input is array of whole numbers with negative numbers   
 **Given** Function multiplier\_check is called  
 **When** User enters array of whole numbers with negative numbers like (1,-4,6,-7,8,10,16,19,-18,20) as a parameter **Then** it should accept the values   
 **And** the result should be (-18,-4,6,8,16, 20)

**Scenario 2.2:** When input is single negative number like (-6) result should be (-6)   
 **Given** Function multiplier\_check is called  
 **When** User enters array of single negative whole numbers like (-6) as a parameter **Then** it should accept the values   
 **And** the result should be (-6)

**Scenario 3**Verify if array with duplicate numbers is entered as a parameter, it should accept the values, return multiplier of either 4 or 6 or both and result should show unique elements only

**Scenario 3.1:** When input is array with duplicate numbers  
 **Given** Function multiplier\_check is called  
 **When** User enters array with duplicate numbers like (1,1,-4,6,-7,8,10,16,19,-18,20,8,12,-4) as a parameter **Then** it should accept the values   
 **And** the result should be (-18,-4,6,8,12,16,20)   
 **And** theresult should show unique elements only

**Scenario 4**Verify if array with big number like 18/19 digit is entered as a parameter, it should accept the value and function should give expected result.

**Scenario 4.1:** When input includes big numbers  
 **Given** Function multiplier\_check is called  
 **When** User enters array with big number like 18/19 digit such as (3,100,-9000000000000000000,10,9000000000000000000,19,18,20) as a parameter **Then** it should accept the values   
 **And** the result should be (-9000000000000000000, 18, 20, 100, 9000000000000000000)

**Negative Scenarios:**

**Scenario 5**Verify if array with values other than whole number is entered as a parameter. It should show result for all whole numbers which are divisible by 4, 6 or both. And should show message for unacceptable values.

**Scenario 5.1:** When input includes decimal numbers  
 **Given** Function multiplier\_check is called  
 **When** User enters array with decimal numbers, (3,4,8,1.2,80,8.8,20,20.4,60.1,60.6,60.4) as a parameter **Then** it should show result for all whole numbers which are divisible by 4, 6 or both which is (4,8,20,80)  
 **And** the result should also show message “Please enter array with proper whole number.” for unacceptable values

**Scenario 5.2:** When input includes string   
 **Given** Function multiplier\_check is called  
 **When** User enters array with string, (5,6,8,7,4,100,30,”apple”) as a parameter **Then** it should show result for all whole numbers which are divisible by 4, 6 or both which is (4,6,8,30,100)  
 **And** the result should also show message “Please enter array with proper whole number.” for unacceptable values

**Scenario 5.3:** When input includes predefined or special characters  
 **Given** Function multiplier\_check is called  
 **When** User enters array with predefined or special characters, (5,’\*’,8,7,4,100,30) as a parameter **Then** it should show result for all whole numbers which are divisible by 4, 6 or both which is (4,8,30,100)  
 **And** the result should also show message “Please enter array with proper whole number.” for unacceptable values

**Scenario 5.4:** When input includes non-whole numbers   
 **Given** Function multiplier\_check is called  
 **When** User enters array with non-whole numbers ('A', 'b', 'c','\*', 4.5, 6.7, 8, 6, 12) as a parameter **Then** it should show result for all whole numbers which are divisible by 4, 6 or both which is (6, 8, 12)  
 **And** the result should also show message “Please enter array with proper whole number.” for unacceptable values

**Scenario 6**Verify if empty array is entered as a parameter. It should not accept the value and give message “Array is empty. Please enter some valid numbers.”

**Scenario 6.1:** When input is empty array   
 **Given** Function multiplier\_check is called  
 **When** User enters empty array as a parameter **Then** it should not accept the value   
 **And** the result should also show message “Array is empty. Please enter some valid numbers.”

**Scenario 7**Verify if array with null or blank elements is entered as a parameter, it should show result for all whole numbers which are divisible by 4, 6 or both and should also give message “Please enter array with proper whole number.”

**Scenario 7.1:** When input array includes blank   
 **Given** Function multiplier\_check is called  
 **When** User enters array with blank, (3,’’,8,10,16,19,18,20) as a parameter  
 **Then** it should show result for all whole numbers which are divisible by 4, 6 or both which is (8, 16, 18,20)  
 **And** the result should also show message “Please enter array with proper whole number.” for unacceptable values

**Scenario 7.2:** When input array includes space as value  
 **Given** Function multiplier\_check is called  
 **When** User enters array with space (3,’ ’,8,10,16,19,18,20) as a parameter  
 **Then** it should show result for all whole numbers which are divisible by 4, 6 or both which is (8, 16, 18, 20)  
 **And** the result should also show message “Please enter array with proper whole number.” for unacceptable values

**Scenario 7.3:** When input array includes null value  
 **Given** Function multiplier\_check is called  
 **When** User enters array with null value, (3,100,8,10,null,19,18,20) as a parameter  
 **Then** it should show result for all whole numbers which are divisible by 4, 6 or both which is (8, 18, 20, 100)  
 **And** the result should also show message “Please enter array with proper whole number.” for unacceptable values

**Scenario 8**Verify if array with big number is entered as a parameter, it should show result for all whole numbers which are divisible by 4, 6 or both and within the limit -9899999999999990000 to 9899999999999999999 and should also give message “Please enter array element within range -9899999999999990000 to 9899999999999999999.”

**Scenario 8.1:** When input array is big numbers   
 **Given** Function multiplier\_check is called  
 **When** User enters array with big number (3,100,-9900000000000000000,10,90000000000000000000,19,18,20) as a parameter  
 **Then** it should show result for all whole numbers which are divisible by 4, 6 or both which is (18, 20, 100)  
 **And** the result should also show message “Please enter array element within range -9899999999999990000 to 9899999999999999999.”