In [ ]:
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"""
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MS(BA)
Assignement 2
"""
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In [6]:
```
#Question 1
#sum of integers between two user entered numbers

num_1 = int(input("Enter 1st integer:"))
num_2 = int(input("Enter 2nd integer:"))

sum1 = sum(range(num_1, num_2 + 1))
print("The sum of all integers between", num_1, "and", num_2, "is:", sum1)
```

```
Enter the first integer:2
Enter the second integer:8
The sum of all integers between 2 and 8 is: 35
```

In [9]:
```
# Question no 2
f = open("C:\\Users\\haier\\Desktop\\poem.txt", "r")
data = f.read()
words = data.split()

# Specified Word whose frequency is to be calculated
countFreq_word = "Python"

word_occurence = 0

for i in words:
        if i.lower() == countFreq_word.lower():
                word_occurence += 1
        else:
            pass

print(word_occurence)
```

```
0
```

In [21]:
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# Question 3:
#Finding positive, negative, odd and even integers from list
list_1 = []
print("Enter 15 integers:")
# Taking input of 15 integers from user
for x in range(0, 16):
    element = int(input())
    list_1.append(element)
# Printing the list created by user
print("List of numbers entered is: \n ", list_1)

# Initializing all counters to 0
pos_count, neg_count, even_count, odd_count = 0, 0, 0, 0

# Checking each element in the list and classifying them as pos, neg, even, odd
for i in list_1:
    if i > 0 and i % 2 == 0:
        # The element is: Positive and Even
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        pos_count += 1
        even_count += 1
    elif i > 0 and i % 2 != 0:
        # The element is: Positive and Odd
        pos_count += 1
        odd_count += 1
    elif i < 0 and i % 2 == 0:
        # The element is: Negative and Even
        neg_count += 1
        even_count += 1
    else:
        # The element is: Negative and Odd
        neg_count += 1
        odd_count += 1

# Printing the frequencies of positive, negative, even and odd integers from the list
print("The list contains: \n "
      "Positives:", pos_count, '\n',
      "Negatives:", neg_count, '\n',
      "Even:", even_count, '\n',
      "Odd:", odd_count)
```

```
Enter 15 integers:
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
15
List of numbers entered is:
  [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 15]
The list contains:
 Positives: 16
 Negatives: 0
 Even: 7
 Odd: 9
```

In [15]:

```
## Question 4
values_1 = []
print("Enter 10 integers:")
# Taking input of 10 integers from user
for x in range(0, 10):
    element = int(input())
    values_1.append(element)
# Printing the list created by user
print("List of numbers entered is: \n ", values_1)

# Sum of integers at odd indexes
sum = 0
for i in values_1[1::2]:
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    sum2 = sum2 + i
print("Sum of integers at odd indexes of the list is: ", sum2)

# Division by 2 of even index integers
mylist = []
div = 0
for i in values_1[::2]:
    div = i / 2
    mylist.append(div)
print("Results of integers at even indexes when divided by 2: \n ", mylist)

#Removing duplicate values from my_values
values_1 = set(values_1)
print(values_1)
```

```
Enter 10 integers:
1
2
3
4
5
6
7
8
9
-1
List of numbers entered is:
  [1, 2, 3, 4, 5, 6, 7, 8, 9, -1]
Sum of integers at odd indexes of the list is:  19
Results of integers at even indexes when divided by 2:
  [0.5, 1.5, 2.5, 3.5, 4.5]
{1, 2, 3, 4, 5, 6, 7, 8, 9, -1}
```

In [22]:
```
#Question 5
rows = 8
# rows = int(input("Enter the number of row "))
for i in range(1, rows + 1):
    for j in range(1, i + 1):
# multiplication current column and row
        square = i * j
        print(i * j, end='  ')
    print()
```

```
1
2  4
3  6  9
4  8  12  16
5  10  15  20  25
6  12  18  24  30  36
7  14  21  28  35  42  49
8  16  24  32  40  48  56  64
```

In [ ]:
```
# END
```