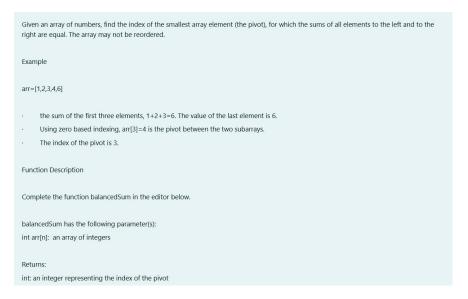
Name: Santhosh M Reg no: 240701475

Week 13: passing array to a function

1. balanced array

Problem statement:



Program:



2. Sum them all

Problem statement:

```
Calculate the sum of an array of integers.

Example

numbers = [3, 13, 4, 11, 9]

The sum is 3 + 13 + 4 + 11 + 9 = 40.

Function Description

Complete the function arraySum in the editor below.

arraySum has the following parameter(s):
int numbers[n]: an array of integers

Returns
int: integer sum of the numbers array
```

Program:

```
^{st} Complete the 'arraySum' function below.
 2
     * The function is expected to return an INTEGER.
* The function accepts INTEGER_ARRAY numbers as parameter.
 4
 6
8 int arraySum(int numbers_count, int *numbers)
          int sum=0;
for(int i=0;i<numbers_count;i++)</pre>
10
11
12 •
               sum+=numbers[i];
13
14
15
          return sum;
16
17
```

3. Minimum difference sum

Problem statement:

Program:

```
* Complete the 'minDiff' function below.
     * The function is expected to return an INTEGER.
 4
     * The function accepts INTEGER ARRAY arr as parameter.
 5
 6
 8
    int minDiff(int arr count, int* arr)
9
         for(int i=0;i<arr_count-1;i++)
10
11
12
             for(int j=0;j<arr_count-i-1;j++)</pre>
13
14
                 if(arr[j]>arr[j+1])
15
16
                     int temp=arr[j];
17
                     arr[j]=arr[j+1];
18
                     arr[j+1]=temp;
19
            }
20
21
         int sum=0;
for(int i=0;i<arr_count-1;i++)</pre>
22
23
24
25
             sum+=abs(arr[i]-arr[i+1]);
26
27
         return sum;
28
    }
29
```

	Test	Expected	Got	
~	<pre>int arr[] = {5, 1, 3, 7, 3}; printf("%d", minDiff(5, arr))</pre>	6	6	~