**CodeVita Season IV Round 1 : Accico Equi Pairs**

**Problem : Accico Equi Pairs**

Ron Wesley has been bit by a three headed snake and Harry Potter is searching for a potion. The Witch promises to tell the ingredients of the medicine if Harry can find **equi pair** of an array. Listen to the conversation between Harry The witch to know more about equi pairs.   
**Conversation:-**   
*The Witch : To find the equi pair, you must know how to find the slices first.  
Harry         : What is a slice?  
The Witch : If Z is an array with N elements, a slice of indices (X, Y) is Z[X] + Z[X+1]...Z[Y]  
Harry         : How can I use it to find equi pair?  
The Witch : (a, b) is an equi pair if slice of (0, a-1) = slice of (a+1, b-1) = slice of (b+1, N-1) and b>a+1 and size of array > 4*

**Input Format:**   
An array of N integers delimited by white space

**Output Format:**   
Print equi pair in first line in the format { a,b }  
Print slices in the format { 0,a-1 }, { a+1,b-1 }, { b+1,N-1 }   
OR   
Print "Array does not contain any equi pair" if there are no equi pairs in the array

**Constraints:**

**Zi >= 0 and 1<= i <=N**

**size of array (N) > 4**

**b > (a+1)**

[**Sample Input and Output**](https://www.blogger.com/null)

|  |  |  |
| --- | --- | --- |
| **SNo.** | **Input** | **Output** |
| 1 | 8 3 5 2 10 6 7 9 5 2 | Indices which form equi pair { 3,6 } Slices are { 0,2 },{ 4,5 },{ 7,9 } |
| 2 | 6 2 6 2 3 3 1 9 | Array does not contain any equi pair |

[**Explanation for sample input output 1:**](https://www.blogger.com/null)  [Here index { 3,6 } is an equi pair.](https://www.blogger.com/null) [Because Slice of { 0,2 } = 8+3+5=16 is equal to Slice of { 4,5 }=10+6 = 16 and it is equal to Slice of { 7,9 }=9+5+2 =16](https://www.blogger.com/null)

***Note***:   
*Please do not use package and namespace in your code. For object oriented languages your code should be written in one class.*

***Note***:   
*Participants submitting solutions in C language should not use functions from / as these files do not exist in gcc*

***Note***:   
*For C and C++, return type of main() function should be int.*

***SOLUTION :  IN JAVA***

*import java.util.\*;  
public class AccicoPeris {  
    public static void main(String []args){  
    int n,count=0;String s,s1,s2;char[] ch;  
    Scanner sc=new Scanner(System.in);  
    n=sc.nextInt();  
int []a=new int[n];  
if(n<=4){  
    System.out.println("invalid input");  
}  
else  
{  
for(int m=1;m<=n;m++){  
    a[m-1]=sc.nextInt();  
    if(a[m-1]<=0){  
        System.out.println("invalid input");     
    }  
  
  
for(int i=1;i<=n;i++){  
    for(int j=(i+2);j<=n;j++){  
        int sum1=0,sum2=0,sum3=0,count1=0,count2=0,count3=0;  
     
         
        for(int k=0;k<i;k++){  
             count1++;  
             sum1+=a[k];  
        }  
        for(int k=i+1;k<=j-1;k++){  
             count2++;  
             sum2+=a[k];  
        }  
        for(int k=j+1;k<=n-1;k++){  
            count3++;  
             sum3+=a[k];  
        }  
        if(sum1==sum2&&sum2==sum3&&count1>1&&count2>1&&count3>1){  
            System.out.println("Indices which form an equi pair { "+i+","+j+" } Slices are {0, "+(i-1)+"} , {"+(i+1)+","+(j-1)+"} , {"+(j+1)+","+(n-1)+"}");  
            count++;  
        }  
        }     
}  
}}  
if(count==0){  
    System.out.println("Array does not contain any equi pair.");  
}  
}  
}*

*eg:*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4 | 2 | 4 | 6 | 0 | 5 | 5 | 1 | 0 |

Equi pairs are (2,5)

For(a=0;a<n;a++)

For(b=a+1;b<n;b++)

{

S1=0;

S2=0;

S3=0;

For(i=0;i<a;i++)

S1+=arr[i];

For(i=a+1;i<b;i++)

S2+=arr[i];

For(i=b+1;i<n;i++)

S3+=arr[i];

If(s1==s2 && s1==s3)

{

Printf(“\n the equi pairs is(%d,%d)\n\n”,a,b);

Return 0;

}