PLACEMENTS KEY'S

Coding Challenge #13 (Question)

Day - 7

Tyler had a list of elements with him and he needs a C developer to extract the even numbers from that list and know the sum of all those even numbers. Write an application program according to Tyler's requirements.

INPUT FORMAT:

1. 1st line of input takes the size of list of elements(n)
2. 2nd line of input takes the elements for the list.

OUTPUT FORMAT:

Application should extract the even numbers from the list and put the total sum as output to Tyler.

SAMPLE INPUT 0:

6
1 2 4 6 8 9

SAMPLE OUTPUT 0:

20

EXPLANATION:

Even numbers in the list are 2,4,6,8
Sum of them = 2+4+6+8=20

SAMPLE INPUT 1:

10
12 2 3 21 24 25 27 23 5 7

SAMPLE OUTPUT 1:

38

EXPLANATION:

Even numbers in the list are 12,2,24
Sum of them = 12+2+24=38

PLACEMENTS KEY'S

Coding Challenge #13 (C Solution)

Day - 7

```c
#include <stdio.h>

int main()
{
	printf("Enter the size of array\n");
	int size;
	scanf("%d",&size);
	int array[size];
	printf("Enter the elements\n");
	for(int i=0;i<size;i++){
		scanf("%d",&array[i]);
	}
	int sum=0;
	for(int i=0;i<size;i++){
		if(array[i]%2==0)
			sum=sum+array[i];
		else
			continue;
	}
	printf("%d",sum);
}
```

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Coding Challenge #13 (JAVA Solution)

Day - 7

```
import java.util.*;
public class EvenSum
{
	public static void main(String[] args)
	{
		Scanner input = new Scanner(System.in);
		System.out.println("Enter the size of array");
		int size = input.nextInt();
		int[] array = new int[size];
		System.out.println("Enter the elements");
		for(int i=0;i<size;i++){
			array[i]=input.nextInt();
		}
		int sum=0;
		for(int i=0;i<size;i++){
			if(array[i]%2==0)
				sum=sum+array[i];
			else
				continue;
		}
		System.out.println(sum);
	}
}
```

PLACEMENTS KEY'S

Coding Challenge #14 (Question)

Day - 7

User wants to list out all the Armstrong numbers in the interval given. Develop an application program to print the Armstrong numbers between the given interval.

ARMSTRONG NUMBER: If the sum of cubes of each digit is equal to the number itself, then it is said to be an Armstrong number.

E,g 153 is an Armstrong number as $1^3+5^3+3^3=153$, the number itself.

INPUT FORMAT:

User must give the intervals for finding the Armstrong numbers in between.

OUTPUT FORMAT:

Print all the Armstrong numbers between x and y

SAMPLE INPUT 0:

100 200

SAMPLE OUTPUT 0:

153

SAMPLE INPUT 1:

10 500

SAMPLE OUTPUT:

153 370 371 407

PLACEMENTS KEY'S

Coding Challenge #14 (C Solution)

Day - 7

```c
#include <stdio.h>

int main()
{
	printf("Enter the start and end\n");
	int start,end;
	scanf("%d,%d",&start,&end);
	for(int i=start;i<end;i++){
		int ch,r,sum=0;
		ch=i;
		while(ch!=0){
			r=ch%10;
			sum = sum+(r*r*r);
			ch=ch/10;
		}
		if(sum==i)
			printf("%d ",i);
	}
}
```

PLACEMENTS KEY'S

Coding Challenge #14 (JAVA Solution)

Day - 7

```
import java.util.*;
public class ArmstrongList
{
	public static void main(String[] args)
	{
		Scanner input = new Scanner(System.in);
		System.out.println("Enter the start and end");
		int start = input.nextInt();
		int end = input.nextInt();
		for(int i=start;i<end;i++){
			int ch,r,sum=0;
			ch=i;
			while(ch!=0){
				r=ch%10;
				sum = sum+(r*r*r);
				ch=ch/10;
			}
			if(sum==i)
				System.out.print(i + " ");
		}
	}
}
```