

# Sri Krishna College of Technology

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Branch :Sri Krishna College of Technology

Department :CSE

Batch :2023-27

Degree :BE-CSE

2023\_27\_I\_PS using CPP\_IRC

PSCPP\_Pointers\_Practise

Attempt : 1

Total Mark : 100

Marks Obtained : 97

## Section 1 : Coding

1. Write a program to obtain the value of N and print N even elements using pointers.

**Answer**

```
// You are using GCC
#include<iostream>
using namespace std;
int main()
{
    int a,i,*b;
    cin>>a;
    b=&a;
    for(i=1;i<=*b;i++)
        cout<<i*2<<" ";
}
```

**Status : Correct**

**Marks : 10/10**

2. Problem Statement:

Write a C++ program to find the modulus of two numbers using pointers.

**Answer**

```
// You are using GCC
#include<iostream>
using namespace std;
int main()
{
    int a,b,*c,*d;
    cin>>a>>b;
    c=&a;
    d=&b;
    cout<<*c<<" "<<*d<<" "<<*c%*d;
}
```

**Status :** Correct

**Marks :** 10/10

### 3. Problem Statement:

Write a program to count the number of vowels and consonants in a given string using pointers

**Answer**

```
#include<bits/stdc++.h>

using namespace std;
int main()
{
    char *str=(char*)malloc(100*sizeof(char));
    char *s=str;
    int vowel=0,consonant=0;
    cin>>str;
    while(*s)
    {
        switch(*s)
        {
            case 'a':
            case 'e':
            case 'i':
```

```

        case 'o':
        case 'u':
        case 'A':
        case 'E':
        case 'I':
        case 'O':
        case 'U':
            vowel+=1;
            break;
        default:
            consonant+=1;
    }
    s++;
}
cout<<vowel<<" "<<consonant;
}

```

**Status :** Correct

**Marks :** 10/10

#### 4. Problem Statement:

Write a C++ program to concatenate two arrays using pointers.

#### Answer

```

// You are using GCC
#include<bits/stdc++.h>
using namespace std;
int main()
{
    int c,d;
    cin>>c;
    int a[c];
    for(int i=0;i<c;i++)
        cin>>a[i];
    cin>>d;
    int b[d];
    for(int j=0;j<d;j++)
        cin>>b[j];
    for(int k=0;k<c;k++)
        cout<<a[k]<<" ";
    for(int l=0;l<d;l++)

```

```
    cout<<b[l]<<" ";  
}
```

**Status :** Correct

**Marks :** 10/10

## 5. Problem Statement:

Using pointers, write a C++ program to sort an integer array in ascending order.

Note : Dont use the array concept. Use pointer.

### Answer

```
// You are using GCC  
#include<bits/stdc++.h>  
using namespace std;  
int main()  
{  
    int i,j,n,temp;  
    cin>>n;  
    int *arr;  
    for(i=0;i<n;i++)  
        cin>>*(arr+i);  
    for(i=0;i<n;i++)  
    {  
        for(j=i+1;j<n;j++)  
        {  
            if(*(arr+i)>*(arr+j))  
            {  
                temp=*(arr+i);  
                *(arr+i)=*(arr+j);  
                *(arr+j)=temp;  
            }  
        }  
    }  
    for(i=0;i<n;i++)  
        cout<<*(arr+i)<<" ";  
}
```

**Status :** Correct

**Marks :** 10/10

## 6. Problem Statement:

Write a C++ program to print the sum of array elements using pointers.

### **Answer**

```
// You are using GCC
#include<bits/stdc++.h>
using namespace std;
int main()
{
    int i,j,n,sum=0;
    cin>>n;
    int *add;
    if(n<=10&& n>0)
    {
        for(i=0;i<n;i++)
            cin>>*(add+i);
        for(i=0;i<n;i++)
        {
            sum+=*(add+i);
        }
        cout<<sum;
    }
    else
        cout<<"Invalid";
}
```

**Status :** Correct

**Marks :** 10/10

## 7. Problem Statement:

Write a C++ program that fetches a word and prints the same using pointers.

### **Answer**

```
// You are using GCC
#include<bits/stdc++.h>
using namespace std;
int main()
```

```

{
    char *str=(char*)malloc(100*sizeof(char));
    char *s=str;
    cin>>str;
    cout<<s;
}

```

**Status :** Correct

**Marks :** 10/10

## 8. Problem Statement:

Write a C++ program to fetch five integers in an array and print them in reverse order using pointers.

### Answer

```

// You are using GCC
#include<bits/stdc++.h>
using namespace std;
int main()
{
    int a[5];
    for(int i=0;i<5;i++)
        cin>>a[i];
    if(a[0]>0&&a[1]>0&&a[2]>0&&a[3]>0&&a[4]>0)
    {
        for(int j=4;j>=0;j--)
            cout<<a[j]<<" ";
    }
    else
        cout<<"Invalid";
}

```

**Status :** Partially correct

**Marks :** 7/10

## 9. Maximum Element in an Array

Write a program to find the maximum element in an array using pointers.

Note:

Refer to the problem requirements

**Answer**

```
// You are using GCC
#include<bits/stdc++.h>
using namespace std;
int main()
{
    int *a,n;
    cin>>n;
    for(int i=0;i<n;i++)
    {
        cin>>*(a+i);
    }
    int max=*(a+0);
    for(int i=0;i<n;i++)
    {
        if(max<*(a+i))
            max=*(a+i);
        else
            *(a+i)=*(a+i);
    }
    cout<<max<<" is the maximum element";
}
```

**Status : Correct****Marks : 10/10****10. Compare 2 arrays**

Write a program to find whether 2 arrays are contains the same element in same index position using pointers.

**Answer**

```
// You are using GCC
#include<bits/stdc++.h>
using namespace std;
int main()
{
    int c,d=0;
    cin>>c;
    int a[c];
    for(int i=0;i<c;i++)
```

```
cin>>a[i];
int b[c];
for(int j=0;j<c;j++)
cin>>b[j];
for(int k=0;k<c;k++)
{
    if(a[k]== b[k])
        d+=1;
    else
        ;
}
if(d==c)
cout<<"yes";
else
cout<<"no";
}
```

**Status :** Correct

**Marks :** 10/10