

## Pointers

### Program No. 1

```
#include <iostream.h>
main( )
{
int x;
cout << "Enter Number: ";
cin >> x;
cout << "\nThe Number is:" << x << endl;
cout << "\n and The address in memory is: " << &x << endl;
}
```

=====

### Program No. 2

```
#include <iostream.h>
main()
{
int x = 1, y = 5;
cout<<endl<<&x<<endl<<&y;
int * ptr;
ptr = &x;
cout<<endl<<ptr;
ptr = &y;
cout<<endl<<ptr<<endl;
}
```

=====

### Program No. 3

```
#include <iostream.h>
main()
{
int x = 1, y = 5;
int * ptr;
ptr = &x;
cout<<*ptr<<endl;
ptr = &y;
cout<<*ptr<<endl; }
```

**Program No. 4**

```
#include<iostream.h>
main ()
{
int value1 = 5, value2 = 15;
int* p1;
int* p2;
p1 = &value1;
p2 = &value2;
*p1 = 10;
*p2 = *p1;
p1 = p2;
*p1 =20;
cout << "value1=" <<value1<<endl;
cout << "value2=" <<value2<<endl;
}
```

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**Program No. 5**

```
#include <iostream.h>
main ()
{
int value1=5,value2=15;
int *mypointer;
mypointer=&value1;
*mypointer=10;
mypointer=&value2;
*mypointer=20;
cout <<"value1="<<value1<<endl;
cout <<"value2="<<value2<<endl;
}
```

=====

**Program No. 6**

```
#include<iostream.h>
void test(int *ptr)
{
```

```
        *ptr=5;
    }
    main( )
    {
        int m;
        m=2;
        cout<<m<<endl;
        test(&m);
        cout<<m<<endl;
    }
```

=====

-Write a program to accept m numbers from the user and print them using new

```
#include<iostream.h>
```

```
int main( )
```

```
{
```

```
int m,i;
```

```
cout<<" enter m\n";
```

```
cin>>m;
```

```
int *x = new int [m];
```

```
for(i=0;i<m;i++)
```

```
cin>>*(x+i);
```

```
cout<<" array elements is \n";
```

```
for(i=0;i<m;i++)
```

```
cout<<*(x+i)<<"\n";  
delete [ ] x;  
return 0;}
```

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**Sheet No.6**

**Due Date: One week after your lab session- Complete by yourself.**

**Exercise 1:**

**Write a program to create an array, take the values of the elements from the user, calculate, and print the sum of their values (using Pointers).**

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**Exercise 2:**

**Write a program to read two arrays (one-dimensional) and then add them (using Pointers).**

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**Exercise 3:**

**Write a program to read two arrays (one-dimensional) and then multiply them (using Pointers).**