

Programming Fundamentals

Assignment No 9

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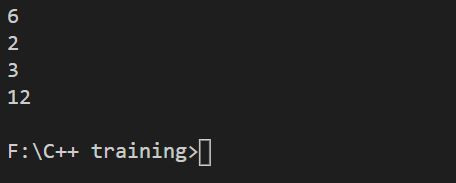
Program No 1:

Write a program that prints the values from an array using pointer variable. The array is given below

int y [ 10 ]= {6,2,3,12};

|  |
| --- |
| #include<iostream>  using namespace std;  int main ()  {  int array[10]={6,2,3,12};  int \*ptr;  ptr=array;  for(int i=0; i<4; i++)  {      cout<<\*(ptr++)<<endl;  }  } |

Output:



Program No 2:

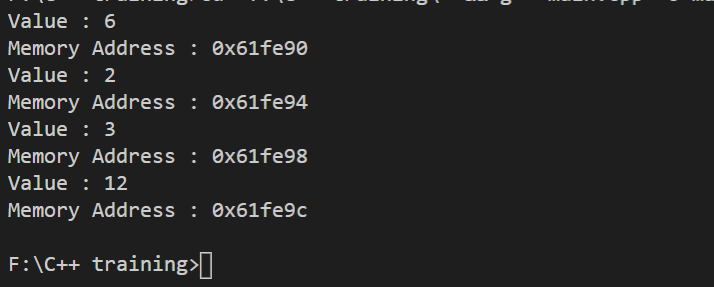
Print the values and memory address from an array

Write a program that prints the values from an array using pointer variable. The array is given below

int y [ 10 ]= {6,2,3,12};

|  |
| --- |
| #include<iostream>  using namespace std;  int main ()  {  int array[10]={6,2,3,12};  int \*ptr;  ptr=array;  for(int i=0; i<10; i++)  {  cout<<"Value : "<<\*(ptr++)<<endl;  cout<<"Memory Address : "<<&array[i]<<endl;  }  return 0;  } |

Output:



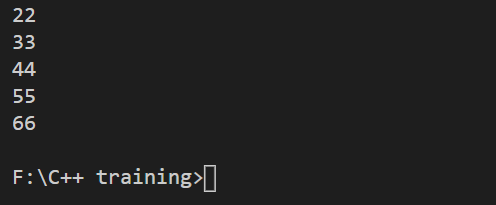
Program No 3:Accessing values by Arithmetic operator.

Write a program that displays the values using pointer variable from an array given below using Arithmetic Increment operator.

int y[5]={22,33,44,55,66};

|  |
| --- |
| #include<iostream>  using namespace std;  int main()  {      int arr[5] = {22,33,44,55,66};      int \*ptr;      int j=0;      ptr = arr;      while(j < 5)      {          cout<<\*(ptr++)<<endl;          j++;      }  } |

Output:



Program No 4:

Write a program that display only 6th element of an array given below using pointers.

int y [10] ={11,22,33, 44,55,66,77,88,99,110}

|  |
| --- |
| #include<iostream>  using namespace std;  int main ()  {  int array[10]={11,22,33,44,55,66,77,88,99,110};  int \*ptr;  ptr=&array[5];  cout<<"The 6th Element of array is : "<<\*ptr;  return 0;  } |

Output:

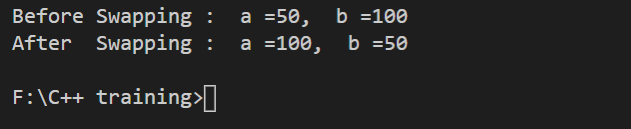


Program No 5:

Swap the same values using pointers.

|  |
| --- |
| #include <iostream>  using namespace std;  void swap(int \*x, int \*y)  {     int temp;     temp = \*x;     \*x = \*y;     \*y = temp;  }  int main()  {     int a=50;     int b=100;     cout << "Before Swapping :  a =" << a << ",  b =" << b << "\n";     swap(&a, &b);     cout << "After  Swapping :  a =" << a << ",  b =" << b << "\n";     return 0;  } |

Output:



Program No 6:

Write a program that gets the radius from user, pass radius to a function areaperi() and function areaperi() returns ―area‖ and ―perimeter‖ by reference

Using a call by reference intelligently we can make a function return more than one value at a time, which is not possible ordinarily.

|  |
| --- |
| #include<iostream>  using namespace std;  void areaperi(int r, float \*peri, float \*a)  {  \*peri = 2\*3.14\*r;  \*a = 3.14\*r\*r;  }  int main()  {  int radius;  float area, perimeter;  cout<<"Enter the radius : ";  cin>>radius;  areaperi(radius, &perimeter, &area);  cout<<"Perimeter is : "<<perimeter<<endl;  cout<<"Area is : "<<area<<endl;  return 0;  } |

Output:

