

Question number 1,

```
#include <iostream>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
    int array[5]={1,2,3,4,5};
```

```
    int *array_ptr;
```

```
    array_ptr=array;
```

```
    cout<<"\n\tvalue of variables and there adresses by the help of pointers."<<endl;
```

```
    for(int i=0 ; i<5 ;i++){
```

```
        cout<<"\t"<<*(array_ptr+i)<<" " <<(array_ptr+i)<<endl;
```

```
    }
```

```
    return 0;
```

```
}
```

```
value of variables and there adresses by the help of pointers.
```

```
1  0x6ffde0
```

```
2  0x6ffde4
```

```
3  0x6ffde8
```

```
4  0x6ffdec
```

```
5  0x6ffdf0
```

Question number 2,

```
#include <iostream>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
    int size;
```

```
    cout<<"Enter the size of array : ";
```

```
    cin>>size;
```

```
    int array[size];
```

```
    int *array_ptr;
```

```
    array_ptr=array;
```

```
    cout<<endl<<"\tInput by the help of pointers here "<<endl<<endl;
```

```
    for(int i=0 ; i<size ;i++){
```

```
        cout<<"Enter value number "<<i+1<<" here : ";
```

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

```
        cout<<endl;
```

```
    }
```

```
    cout<<endl<<"\tOutput by the help of pointers here "<<endl<<endl;
```

```
    for(int i=0 ; i<size ;i++){
```

```
cout<<endl<<"Value number "<<i+1<<" is : "<<*(array_ptr+i);
```

```
}
```

```
return 0;
```

```
}
```

```
Enter the size of array : 5
Input by the help of pointers here
Enter value number 1 here : 1
Enter value number 2 here : 2
Enter value number 3 here : 3
Enter value number 4 here : 4
Enter value number 5 here : 5
Output by the help of pointers here
Value number 1 is : 1
Value number 2 is : 2
Value number 3 is : 3
Value number 4 is : 4
Value number 5 is : 5
```

Question number 3,

```
#include <iostream>
```

```
using namespace std;
```

```

int main()
{

    int a , b, *pointer_a ,*pointer_b ;

    pointer_a=&a;
    pointer_b=&b;

    cout<<"\n\t Enter the value to see wheather they are equal or not \n\n\n ";

    cout<<"Enter value number 1 here : ";
    cin>>*pointer_a;
    cout<<"Enter value number 2 here : ";
    cin>>*pointer_b;

    if(*pointer_a==*pointer_b){

        cout<<"\t\n\nBoth the value are equal  the pointer is saying :) ";
    }

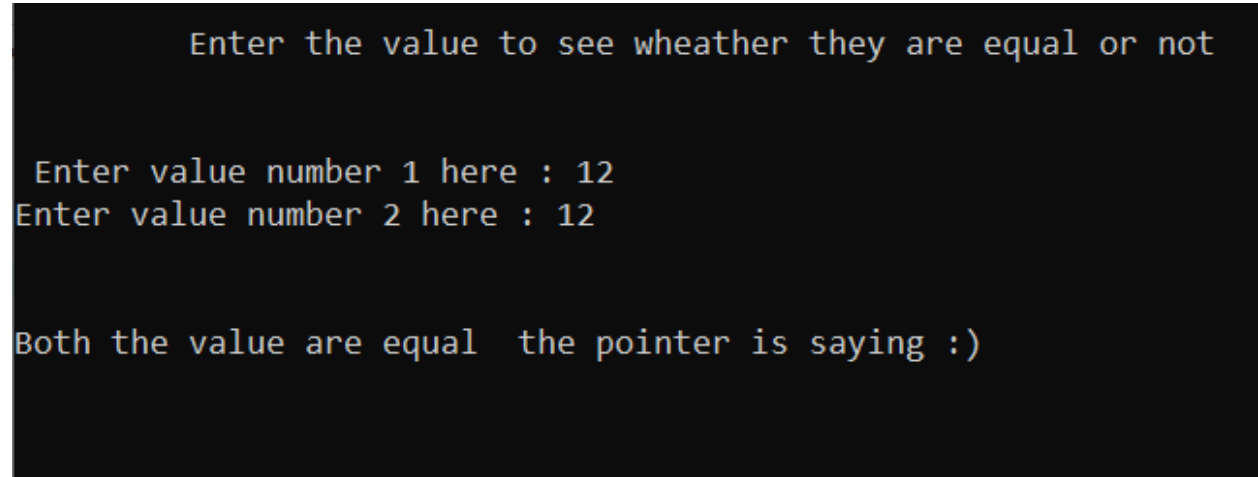
    else if(*pointer_a!=*pointer_b){

        cout<<"\t\n\nBoth the value not equal the pointer is saying :( ";
    }
}

```

```
        cout<<endl<<endl<<endl;

return 0;
}
```

A screenshot of a terminal window with a black background and light green text. The text shows the output of a C++ program. It starts with a prompt "Enter the value to see wheather they are equal or not". Then, it shows two input lines: "Enter value number 1 here : 12" and "Enter value number 2 here : 12". Finally, it displays the result: "Both the value are equal the pointer is saying :)".

```
Enter the value to see wheather they are equal or not

Enter value number 1 here : 12
Enter value number 2 here : 12

Both the value are equal the pointer is saying :)
```

Question number 4,

```
#include<iostream>
```

```
#include<string>
```

```
using namespace std;
```

```
void rev_word (string *word){
```

```
    for(int i = (*word).length() ; i>=0 ; i--){
```

```
        cout<<(*word)[i];
```

```

    }
}

int main(){

    string word1 ;

    cout<<"Enter any word to see it's reversed version : ";

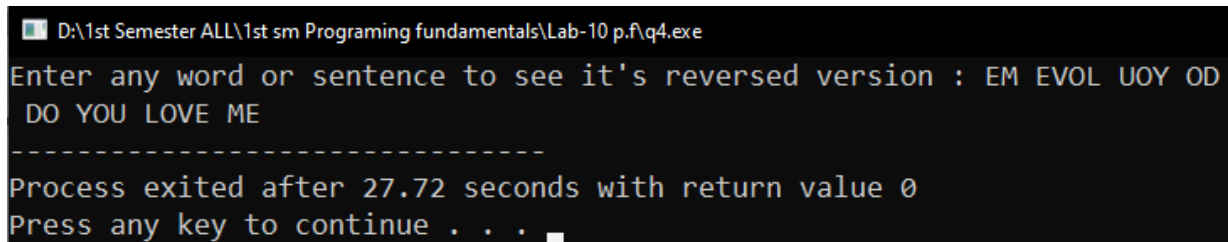
    cin>>word1;

    rev_word (&word1);

    return 0;

}

```



```

D:\1st Semester ALL\1st sm Programing fundamentals\Lab-10 p.f\q4.exe
Enter any word or sentence to see it's reversed version : EM EVOL UOY OD
DO YOU LOVE ME
-----
ED OYU OLVEV EM
Process exited after 27.72 seconds with return value 0
Press any key to continue . . .

```

Question number 5,

```
#include <iostream>
```

```
using namespace std;
```

```
void bubbleSort(int*);
```

```
int main() {
```

```
    int array[10] = {13, 92, 43, 74, 35, 96, 77, 15, 12, 88};
```

```
    cout << endl << "\nIn main Unsorted array  ";
```

```
    cout << endl;
```

```

for (int i = 0; i < 10; i++) {
    cout << "Value number " << i + 1 << " is : " << array[i] << endl;
}

cout << endl << endl;
cout << endl << "\tIn function sorted array  ";
cout << endl;

bubbleSort(array);

return 0;
}

void bubbleSort(int* num) {
    for (int i = 0; i < 10; i++) {
        for (int j = i + 1; j < 10; j++) {
            if (*(num + i) > *(num + j)) {
                int temp = *(num + i);
                *(num + i) = *(num + j);
                *(num + j) = temp;
            }
        }
    }
}

for (int i = 0; i < 10; i++) {
    cout << "Value number " << i + 1 << " is : " << *(num + i) << endl;
}
}

```

D:\1st Semester ALL\1st sm Programing fundamentals\Lab-10 p.f\q5.exe

In main Unsorted array

```
Value number 1 is : 13
Value number 2 is : 92
Value number 3 is : 43
Value number 4 is : 74
Value number 5 is : 35
Value number 6 is : 96
Value number 7 is : 77
Value number 8 is : 15
Value number 9 is : 12
Value number 10 is : 88
```

In function sorted array

```
Value number 1 is : 12
Value number 2 is : 13
Value number 3 is : 15
Value number 4 is : 35
Value number 5 is : 43
Value number 6 is : 74
Value number 7 is : 77
Value number 8 is : 88
Value number 9 is : 92
Value number 10 is : 96
```

Question number 6,

```
#include <iostream>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
    int array[10],*ptr_to_array,i,s_int;
```



```
char check=false;
```

```
ptr_to_array=array;
```

```
cout<<endl<<"\t Input by pointers\n";
```

```
for(i=0 ; i<10 ;i++){
```

```
    cout<<"Enter value number " <<i+1 << " here : " ;
```

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

```
}
```

```
cout<<endl<<"\t Output by pointers\n";
```

```
for( i=0 ; i<10 ;i++){
```

```
    cout<<"Value number " <<i+1 << " is : "<<*(ptr_to_array+i);
```

```
    cout<<endl;
```

```
}
```

```
cout<<endl<<"\t Search by pointers\n";
```

```
cout<<"\n\t Which value do you wanna search ?? : ";
```

```
cin>>s_int;
```

```
for( i=0 ; i<5 ;i++){
```

```
    while (*(ptr_to_array+i)==s_int){
```

```
        check=true;
```

```
break;  
}
```

```
}
```

```
if(check=true){  
cout<<"\nValue is present in this array .";  
}
```

```
return 0;  
}
```

D:\1st Semester ALL\1st sm Programing fundamentals\Lab-10 p.f\q6.exe

```
Input by pointers
Enter value number 1 here : 1
Enter value number 2 here : 2
Enter value number 3 here : 3
Enter value number 4 here : 4
Enter value number 5 here : 5
Enter value number 6 here : 6
Enter value number 7 here : 7
Enter value number 8 here : 8
Enter value number 9 here : 9
Enter value number 10 here : 10
```

```
Output by pointers
Value number 1 is : 1
Value number 2 is : 2
Value number 3 is : 3
Value number 4 is : 4
Value number 5 is : 5
Value number 6 is : 6
Value number 7 is : 7
Value number 8 is : 8
Value number 9 is : 9
Value number 10 is : 10
```

Search by pointers

Which value do you wanna search ?? : 7

Value is present in this array .

Question number 7,

```
#include <iostream>
```

```
using namespace std;
```

```
void swap(int*,int*);
```

```
int main()
```

```
{
```

```
    int num1=10 , num2=20;
```

```
    cout<<"\n\t Numbers Before Swap .\n";
```

```
    cout<<"\t";
```

```
    cout<<num1<<" "<<num2;
```

```
    cout<<endl;
```

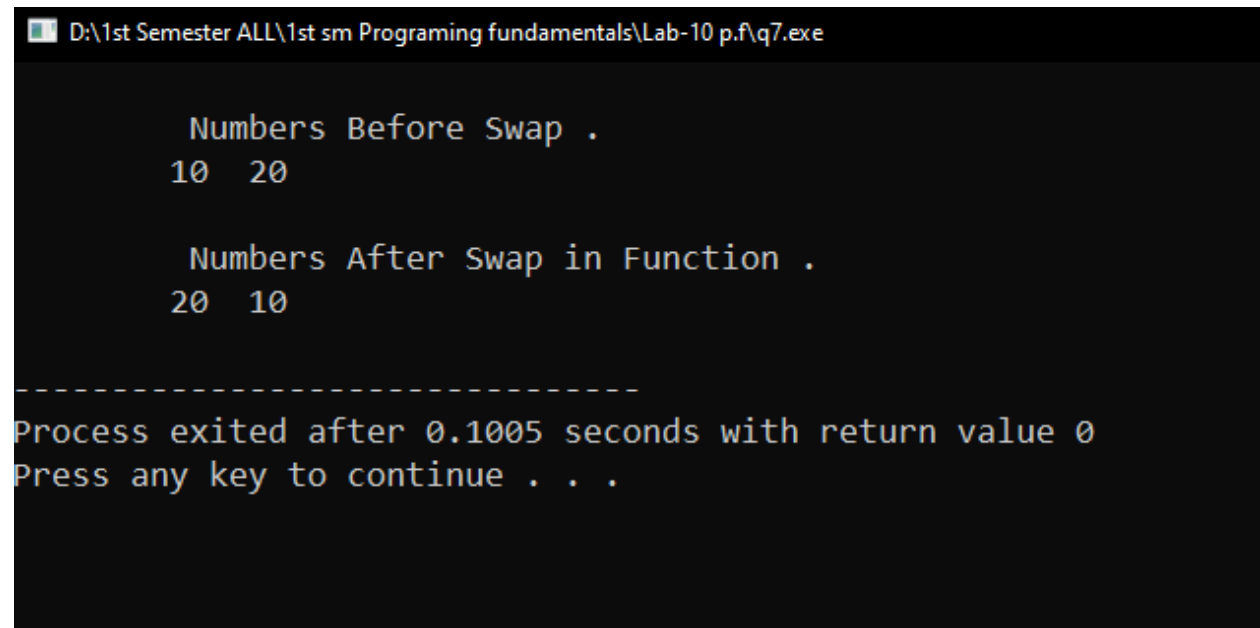
```
    swap(&num1,&num2);
```

```
    cout<<"\n\t Numbers After Swap in Function .\n";
```

```
        cout<<"\t";  
        cout<<num1<<" "<<num2;  
        cout<<endl;  
return 0;  
}
```

```
void swap (int *num1 , int *num2){
```

```
    int temp;  
  
    temp= *num1;  
    *num1=*num2;  
    *num2=temp;  
  
}
```



```
D:\1st Semester ALL\1st sm Programing fundamentals\Lab-10 p.f\q7.exe  
  
Numbers Before Swap .  
10 20  
  
Numbers After Swap in Function .  
20 10  
  
-----  
Process exited after 0.1005 seconds with return value 0  
Press any key to continue . . .
```