

Basic Search

```
include<stdio.h>

int main(){
    int searchnum;
    int array[10] = {11,10,12,14,16,20,24,28,30,40};
    int sayi = 0;

    printf("Enter the num:");
    scanf("%d",&sayi);
    int i;
    for(i=0;i<10;i++){
        printf("%d ", array[i]);
    }
    for(i=0;i<10;i++){
        if(sayi == array[i]){
            sayi=1;
            break;
        }
    }

    if(sayi==1){
        printf("Found the num. index %d ",i);
    }
    else
        printf("did not find");
    return 0;
}
```

Basic Sort

The screenshot shows a Microsoft Visual Studio Code interface with a dark theme. The top menu bar includes File, Edit, View, Project, Build, Debug, Test, Analyze, Tools, Extensions, Window, Help, and Search (Ctrl+Q). The status bar at the bottom shows "121%" and "Ready".

The code editor displays a file named "Sorting1.cpp" under the "Miscellaneous Files" category. The code implements a sorting algorithm for an array of integers. It starts by including stdio.h and conio.h. The main function reads the size of the array and its elements from the user. It then performs two passes: one for ascending ordering and one for descending ordering. In each pass, it iterates through the array and compares adjacent elements. If they are in the wrong order, it swaps them using a temporary variable. Finally, it prints the sorted array.

```
#include <stdio.h> //including stdio.h for printf and other functions
#include<conio.h>

int main() //default function for call
{
    int a[100],n,i,j;
    printf("Array size: ");
    scanf("%d",&n);
    printf("Elements: ");

    for(i=0;i<n;i++)
    {
        scanf("%d",&a[i]);
    }
    for (int i = 0; i < n; i++) //Loop for ascending ordering
    {
        for (int j = i+1; j < n; j++) //Loop for comparing other values
        {
            if (a[i] > a[j]) //Comparing other array elements
            {
                int tmp = a[i]; //Using temporary variable for storing last value
                a[i] = a[j]; //replacing value
                a[j] = tmp; //storing last value
            }
        }
    }
    printf("\n\nAscending : "); //Printing message
    for (int i = 0; i < n; i++) //Loop for printing array data after sorting
    {
        printf(" %d ", a[i]);
    }

    for (int i = 0; i < n; i++) //Loop for descending ordering
    {
        for (int j = i+1; j < n; j++) //Loop for comparing other values
        {
            if (a[i] < a[j]) //Comparing other array elements
            {
                int tmp = a[i]; //Using temporary variable for storing last value
                a[i] = a[j]; //replacing value
                a[j] = tmp; //storing last value
            }
        }
    }
}
```

The screenshot shows the Microsoft Visual Studio IDE interface with the following details:

- Menu Bar:** File, Edit, View, Project, Build, Debug, Test, Analyze, Tools, Extensions, Window, Help.
- Search Bar:** Search (Ctrl+Q) with a magnifying glass icon.
- Solution Explorer:** Shows "Solution1" at the top right.
- Toolbars:** Standard toolbar with icons for file operations like Open, Save, Print, and Find.
- Code Editor:** The main window displays the C++ code for "Sorting1.cpp".
- Code Content:**

```
Sorting1.cpp  ✘
Miscellaneous Files (Global Scope)

{
    if (a[i] > a[j])           //Comparing other array elements
    {
        int tmp = a[i];
        a[i] = a[j];
        a[j] = tmp;
    }
}
printf("\n\nAscending : ");
for (int i = 0; i < n; i++)      //Loop for printing array data after sorting
{
    printf(" %d ", a[i]);
}

for (int i = 0; i < n; i++)      //Loop for descending ordering
{
    for (int j = i+1; j < n; j++) //Loop for comparing other values
    {
        if (a[i] < a[j])       //Comparing other array elements
        {
            int tmp = a[i];
            a[i] = a[j];
            a[j] = tmp;
        }
    }
    printf("\n\nDescending : ");
    for (int i = 0; i < n; i++) //Loop for printing array data after sorting
    {
        printf(" %d ", a[i]);   //Printing data
    }

    return 0;                  //returning 0 status to system
getch();
}
```