

**/\*C Program to implement Selection sort**

**Input : 1. Size of the Array**

**2. Array elements**

**Output : Sorted Array elements in ascending order**

**\*/**

```
#include <stdio.h>
```

```
int main()
```

```
{
```

```
    int array[100], n, i, j, min, swap;
```

```
    printf("\n Enter the size of the array.\n");
```

```
    scanf("%d", &n);
```

```
    printf("\n Enter %d elements.\n", n);
```

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

```
        scanf("%d", &array[i]);
```

```
    for ( i = 0 ; i <= ( n - 2 ) ; i++ )
```

```
    {
```

```
        min = i;
```

```
        // Find the smallest element
```

```
        for ( j = i + 1 ; j <= n-1 ; j++ )
```

```
        {
```

```
            if ( array[j] < array[min] )
```

```
                min = j;
```

```
        }
```

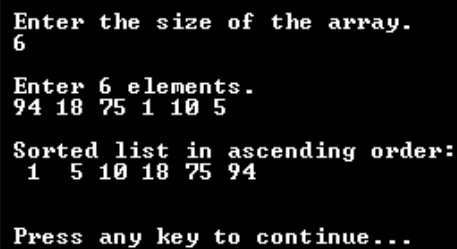
```
        //Swap the smallest element with the first unsorted number
```

```
        swap = array[i];
```

```
    array[i] = array[min];
    array[min] = swap;
}
printf("\n Sorted list in ascending order:\n");

for ( i = 0 ; i < n ; i++ )
    printf("%3d", array[i]);
    printf("\n\n\n ");
return 0;
}
```

**Sample Input and Output:**



```
Enter the size of the array.
6
Enter 6 elements.
94 18 75 1 10 5
Sorted list in ascending order:
1 5 10 18 75 94
Press any key to continue...
```