

```
***** Sorting of number using Selection sort method *****
```

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

```
#include <conio.h>
```

```
int main()
```

```
{
```

```
    // define an array
```

```
    int num[10],n;
```

```
    int i,j,t,snp;
```

```
    printf("Enter the Number of Elements\n");
```

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

```
    printf("\n Enter the elements of the array: ");
```

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

```
    {
```

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

```
    }
```

```
    printf("Array before Selection Sort\n");
```

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

```
    {
```

```
        printf("%d ",num[i]);
```

```
    }
```

```
    // run an outer loop i from 0 to N-1 to repeat the process of selection sort
```

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

```
    {
```

```
        // smallest number position
```

```
        snp=i;
```

```
        // run an inner loop j for selection sort from i+1 to N
```

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

```
        {
```

```
            // now check if the value at num[j] is smaller than value at num[snp]
```

```
            if(num[j]<num[snp])
```

```
            {
```

```
                // if the value is smaller, then store the value of j to snp
```

```
                snp=j;
```

```
            }
```

```
        }
```

```
        // outside the body of inner loop j check if num[i]>num[snp]. If yes then  
swap the numbers
```

```
        if(num[i]>num[snp])
```

```
        {
```

```
        t=num[i];
        num[i]=num[snp];
        num[snp]=t;
    }
}

// print the sorted array
printf("\n\nArray after Selection Sort\n");
for(i=0; i<n; i++)
{
    printf("%d ",num[i]);
}
return 0;
}
```

```

***** Sorting of String using Selection Sort Method*****
#include <stdio.h>
#include <conio.h>
#include<string.h>

int main()
{
    // define an array
    char num[7][20]= {"Python","Java","VB.NET","C#","Perl","COBOL","ORACLE"};
    char t[20];
    int i,j,snp;

    printf("Array before Selection Sort\n");
    for(i=0; i<7; i++)
    {
        printf("%s ",num[i]);
    }

    // run an outer loop i from 0 to N-1 to repeat the process of selection sort
    for(i=0; i<6; i++)
    {
        // smallest string position
        snp=i;

        // run an inner loop j for selection sort from i+1 to N
        for(j=i+1; j<7; j++)
        {
            // now check if the value at num[j] is smaller than value at num[snp]
            if(strcmpi(num[j],num[snp])<0)
            {
                // if the value is smaller, then store the value of j to snp
                snp=j;
            }
        }

        // outside the body of inner loop j check if num[i]>num[snp]. If yes then
        swap the strings
        if(strcmpi(num[i],num[snp])>0)
        {
            strcpy(t,num[i]);
            strcpy(num[i],num[snp]);
            strcpy(num[snp],t);
        }
    }
}

```

```
}

// print the sorted array
printf("\n\nArray after Selection Sort\n");
for(i=0; i<7; i++)
{
    printf("%s ",num[i]);
}
return 0;
}
```