

## Selection Sort

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- in the i(th) iteration, i(th) smallest element is placed in the correct location

-----

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

```
int main()
```

```
{
```

```
    int n,i,j,min,t;
```

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

```
    int a[n];
```

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

```
    {
```

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

```
    }
```

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

```
    {
```

```
        min = i;
```

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

```
        {
```

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

```
            {
```

```
                min = j;
```

```
            }
```

```
        }
```

```
        t = a[i];
```

```
        a[i] = a[min];
```

```
        a[min] = t;
```

```
    }
```

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

```
    {
```

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

```
    }
```

```
}
```