

Experiment No: 02

Experiment Name: Sort an array using Bubble Sort

Code:

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

```
void swap(int *a, int *b) {
```

```
    int temp = *a;
```

```
    *a = *b;
```

```
    *b = temp;
```

```
}
```

```
int main(){
```

```
    int arr[5] = {4,6,90,45,9};
```

```
    joy(arr, 5);
```

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

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

```
    }
```

```
    printf("\n");
```

```
    return 0;
```

```
}
```

```
void joy(int arr[], int n){
```

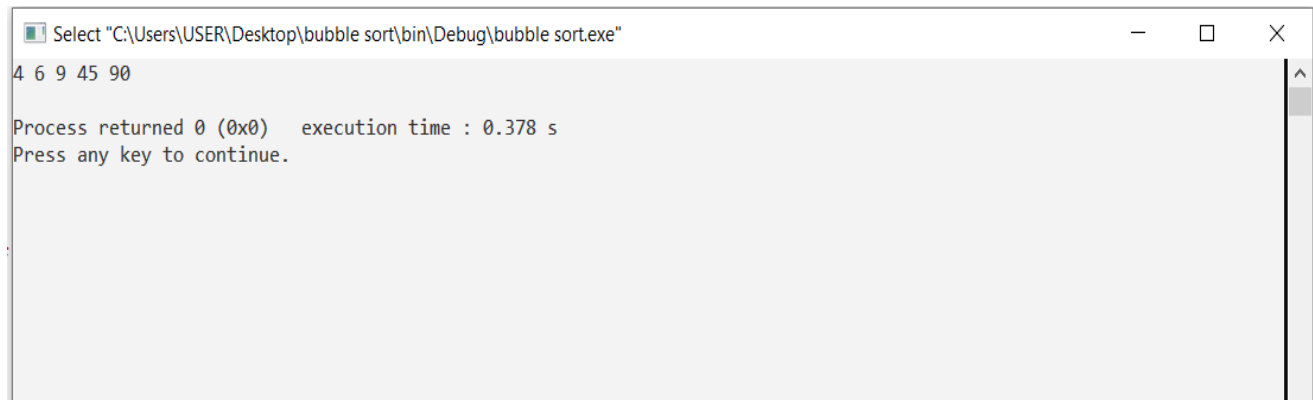
```
    int flag;
```

```
    for(int ph=0; ph<n-1; ph++){
```

```
        flag = 0;
```

```
for(int i = 0; i<n-1-ph; i++){  
    if(arr[i]>arr[i+1])  
    {  
        swap(&arr[i], &arr[i+1]);  
        flag = 1;  
    }  
}  
if (flag == 0)  
    break;  
}  
}
```

Output:



The screenshot shows a Windows command prompt window with the title bar "Select 'C:\Users\USER\Desktop\bubble sort\bin\Debug\bubble sort.exe'". The window contains the following text:

```
4 6 9 45 90  
Process returned 0 (0x0)   execution time : 0.378 s  
Press any key to continue.
```