**Bubble Sort**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 4 | 3 | 2 | 10 | 12 | 1 | 5 | 6 |
| 3 | 4 | 2 | 10 | 12 | 1 | 5 | 6 |
| 2 | 4 | 3 | 10 | 12 | 1 | 5 | 6 |
| 2 | 3 | 4 | 10 | 12 | 1 | 5 | 6 |
| 1 | 3 | 4 | 10 | 12 | 2 | 5 | 6 |
| 1 | 2 | 4 | 10 | 12 | 3 | 5 | 6 |
| 1 | 2 | 3 | 10 | 12 | 4 | 5 | 6 |
| 1 | 2 | 3 | 4 | 12 | 10 | 5 | 6 |
| 1 | 2 | 3 | 4 | 10 | 12 | 5 | 6 |
| 1 | 2 | 3 | 4 | 5 | 12 | 10 | 6 |
| 1 | 2 | 3 | 4 | 5 | 10 | 12 | 6 |
| 1 | 2 | 3 | 4 | 5 | 6 | 12 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 10 | 12 |

#include <stdio.h>  
int main()  
{  
 int ar[8] = {4, 3, 2, 10, 12, 1, 5, 6};  
 int i, j, temp;  
 for (i=0; i<8; i++)  
 {  
 for (j=0; j<i; j++)  
 {  
 if (ar[j] > ar[i])  
 {  
 temp = ar[j];  
 ar[j] = ar[i];  
 ar[i] = temp;  
 }  
 }  
 }  
 for (i=0; i<8; i++) printf("%d ", ar[i]);  
}

C