```c
 8
 9  #include <stdio.h>
10  #include<time.h>
11  int main()
12  {
13      int n, i, j, temp;
14      clock_t start, end;
15      printf("Enter number of elements\n");
16      scanf("%d", &n);
17      int arr[n];
18    printf("\n The elements are: \n");
19      for(i=0;i<n;i++)
20      {
21          arr[i] = rand()%10000;
22          printf("%d ",arr[i]);
23      }
24      start=clock();
25      for(i=0;i<80000000;i++);
26      for (i = 1 ; i <= n - 1; i++)
27      {
28          j = i;
29              while ( j > 0 && arr[j-1] > arr[j])
30              {
31                  temp     = arr[j];
32                  arr[j]   = arr[j-1];
33                  arr[j-1] = temp;
34                  j--;
35              }
```

input

```c
18      printf("\n The elements are: \n");
19      for(i=0;i<n;i++)
20      {
21          arr[i] = rand()%10000;
22          printf("%d ",arr[i]);
23      }
24      start=clock();
25      for(i=0;i<80000000;i++);
26      for (i = 1 ; i <= n - 1; i++)
27      {
28          j = i;
29              while ( j > 0 && arr[j-1] > arr[j])
30              {
31                  temp     = arr[j];
32                  arr[j]   = arr[j-1];
33                  arr[j-1] = temp;
34                  j--;
35              }
36      }
37      end=clock();
38      printf("\n Time taken to sort %d numbers is %f Secs\n",n, (((double)(end-start))/CLOCKS_PER_SEC));
39      printf("The list after sorted in asernding order :\n");
40      for (i = 0; i <= n - 1; i++)
41      {
42          printf("%d\n", arr[i]);
43      }
44      return 0;
45  }
46
```

input

```
main.c:21:18: warning: implicit declaration of function 'rand' [-Wimplicit-function-declaration]
          arr[i] = rand()%10000;
                   ^~~~
Enter number of elements
10

  The elements are:
9383 886 2777 6915 7793 8335 5386 492 6649 1421
  Time taken to sort 10 numbers is 0.171016 Secs
The list after sorted in asernding order :
492
886
1421
2777
5386
6649
6915
7793
8335
9383


...Program finished with exit code 0
Press ENTER to exit console.
```