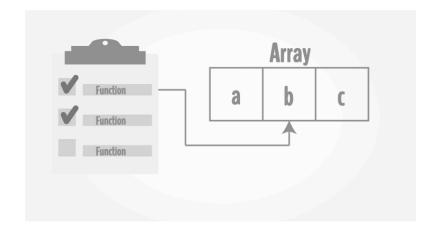
### Diziler





### Suhap SAHIN Onur GÖK

```
int main() {
    int a = 5;
    printf("a: %d\n", a)
```

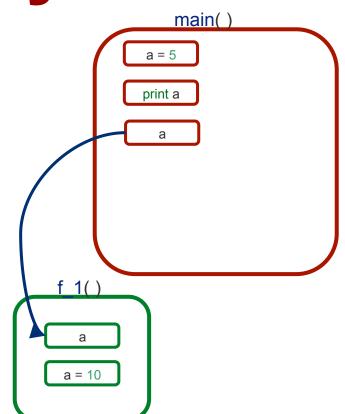
```
main()

a = 5

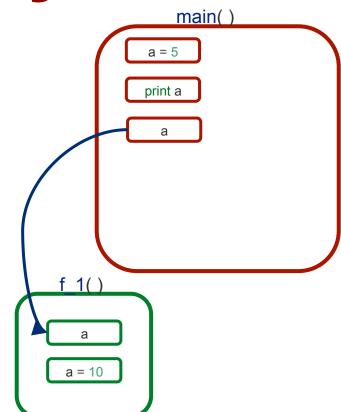
print a
```

return 0;

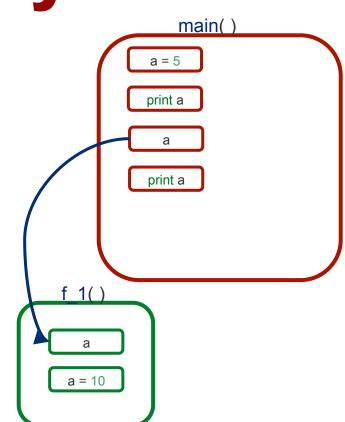
```
void f 1(int a) {
int main() {
              int a = 5;
              printf("a: %d\n", a)
              f_1(a);
               return 0;
```



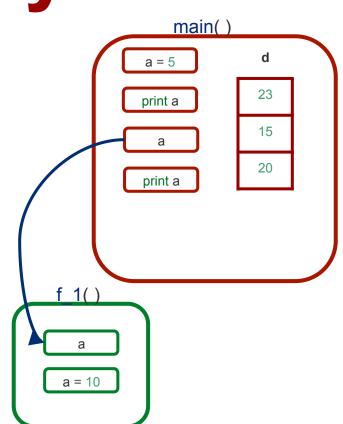
```
void f 1(int a) {
              a = 10;
int main() {
              int a = 5;
              printf("a: %d\n", a)
              f_1(a);
              return 0;
```



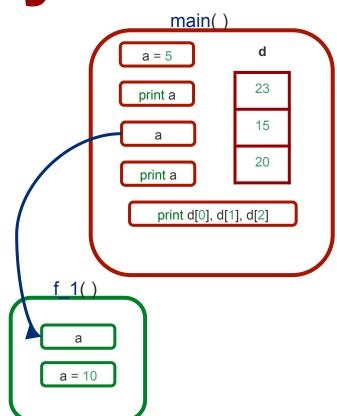
```
void f 1(int a) {
              a = 10;
int main() {
              int a = 5;
               printf("a: %d\n", a)
              f_1(a);
               printf("a: %d\n", a);
               return 0;
```



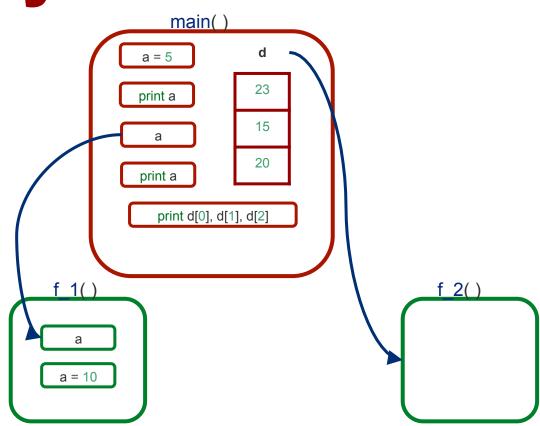
```
void f 1(int a) {
               a = 10;
int main() {
               int a = 5;
               printf("a: %d\n", a)
              f_1(a);
               printf("a: %d\n", a);
               int d[3] = \{11, 22, 33\};
               return 0;
```



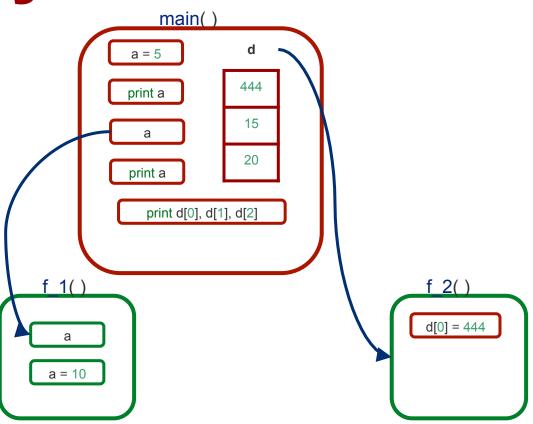
```
void f 1(int a) {
               a = 10;
int main() {
               int a = 5;
               printf("a: %d\n", a)
              f_1(a);
               printf("a: %d\n", a);
               int d[3] = \{11, 22, 33\};
               printf("d: %d %d %d\n", d[0], d[1], d[2]);
               return 0;
```



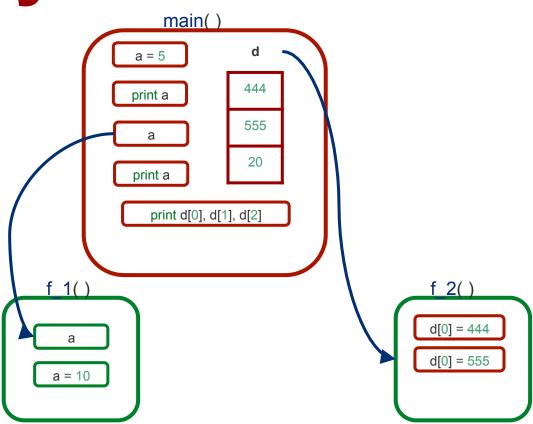
```
void f 1(int a) {
               a = 10:
void f 2(int d[]) {
int main() {
               int a = 5;
               printf("a: %d\n", a)
              f_1(a);
               printf("a: %d\n", a);
               int d[3] = \{11, 22, 33\};
               printf("d: %d %d %d\n", d[0], d[1], d[2]);
              f 2(d);
               return 0;
```



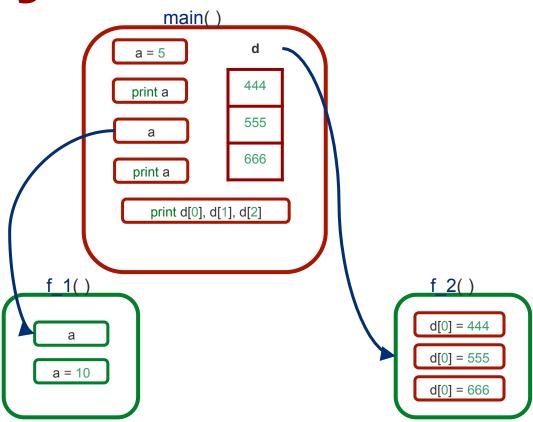
```
void f 1(int a) {
               a = 10:
void f 2(int d[]) {
               d[0] = 444;
int main() {
               int a = 5;
               printf("a: %d\n", a)
              f_1(a);
               printf("a: %d\n", a);
               int d[3] = \{11, 22, 33\};
               printf("d: %d %d %d\n", d[0], d[1], d[2]);
              f 2(d);
               return 0;
```



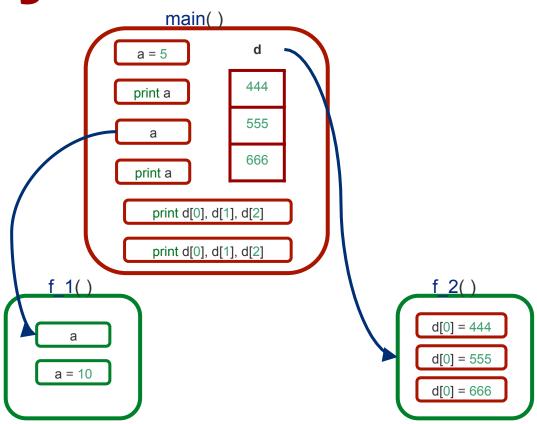
```
void f 1(int a) {
              a = 10:
void f 2(int d[]) {
              d[0] = 444;
              d[1] = 555;
int main() {
              int a = 5;
               printf("a: %d\n", a)
              f_1(a);
               printf("a: %d\n", a);
              int d[3] = \{11, 22, 33\};
               printf("d: %d %d %d\n", d[0], d[1], d[2]);
              f 2(d);
               return 0;
```



```
void f 1(int a) {
              a = 10:
void f 2(int d[]) {
              d[0] = 444;
              d[1] = 555;
              d[2] = 666;
int main() {
              int a = 5;
               printf("a: %d\n", a)
              f_1(a);
               printf("a: %d\n", a);
              int d[3] = \{11, 22, 33\};
               printf("d: %d %d %d\n", d[0], d[1], d[2]);
              f 2(d);
               return 0;
```



```
void f 1(int a) {
               a = 10:
void f 2(int d[]) {
              d[0] = 444;
              d[1] = 555;
              d[2] = 666;
int main() {
              int a = 5;
               printf("a: %d\n", a)
              f 1(a);
               printf("a: %d\n", a);
              int d[3] = \{11, 22, 33\};
               printf("d: %d %d %d\n", d[0], d[1], d[2]);
              f 2(d);
               printf("d: %d %d %d\n", d[0], d[1], d[2]);
               return 0;
```

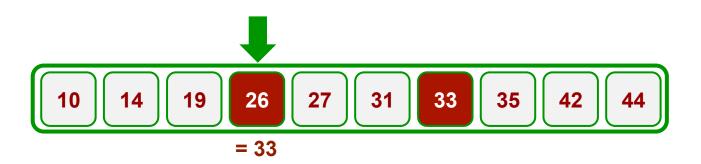


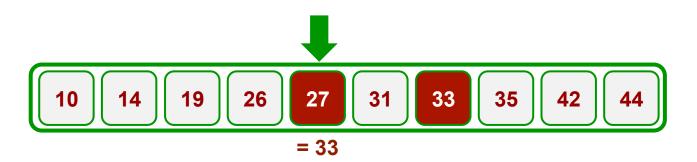


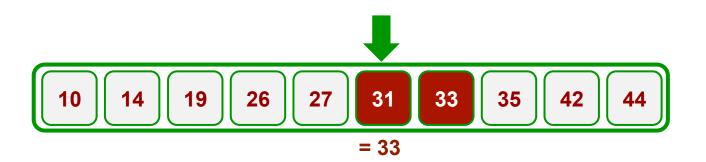


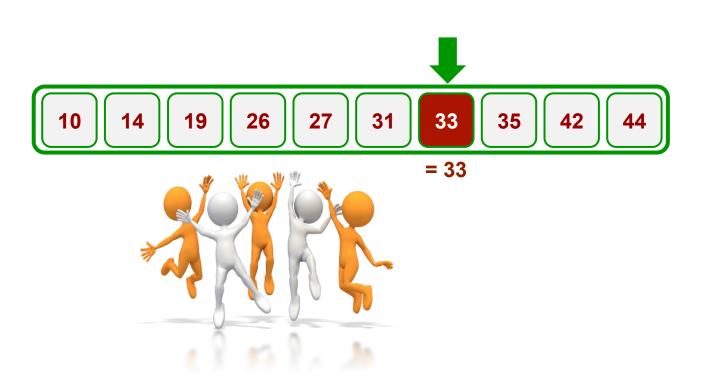












```
#include <stdio.h>
int main() {
   int n[10] = {10, 14, 19, 26, 27, 11, 33, 35, 42, 44};
   while (1) {
```

10 14 19 26 27 31 33 35 42 44

```
}
return 0;
```

```
#include <stdio.h>
int main() {
    int n[10] = {10, 14, 19, 26, 27, 11, 33, 35, 42, 44};
    while (1) {
        int i, aranan;
        printf("aramak istediginiz sayiyi giriniz:");
        scanf("%d", &aranan);
```

10 14 19 26 27 31 33 35 42 44

```
}
return 0;
```

```
#include <stdio.h>
int main() {
    int n[10] = {10, 14, 19, 26, 27, 11, 33, 35, 42, 44};
    while (1) {
        int i, aranan;
        printf("aramak istediginiz sayiyi giriniz:");
        scanf("%d", &aranan);
        int yer = -1;
```

```
10 14 19 26 27 31 33 35 42 44
```

```
}
return 0;
```

```
10 14 19 26 27 31 33 35 42 44
```

```
}
return 0;
```

```
#include <stdio.h>
int main() {
  int n[10] = \{10, 14, 19, 26, 27, 11, 33, 35, 42, 44\};
  while (1) {
     int i, aranan;
     printf("aramak istediginiz sayiyi giriniz:");
     scanf("%d", &aranan);
     int yer = -1;
     for (i = 0; i < 10; i++)
        if (n[i] == aranan)
          ver = i;
     if (ver == -1)
        printf("dizide yok\n");
     else
        printf("dizide bulundugu yer: %d\n", yer);
  return 0:
```

 $\begin{array}{c|c} \hline 10 \end{array} \left[\begin{array}{c} 14 \end{array}\right] \left[\begin{array}{c} 19 \end{array}\right] \left[\begin{array}{c} 26 \end{array}\right] \left[\begin{array}{c} 27 \end{array}\right] \left[\begin{array}{c} 31 \end{array}\right] \left[\begin{array}{c} 33 \end{array}\right] \left[\begin{array}{c} 35 \end{array}\right] \left[\begin{array}{c} 42 \end{array}\right] \left[\begin{array}{c} 44 \end{array}\right]$ 

Alt listenin sıralanması





6 7 3 1 8 4 5 9 10 2

 1
 7
 3
 6
 8
 4
 5
 9
 10
 2

1 7 3 6 8 4 5 9 10 2

1 7 3 6 8 4 5 9 10 2

1 2 3 6 8 4 5 9 10 7

1 2 3 6 8 4 5 9 10 7

1 2 3 6 8 4 5 9 10 7

1 2 3 6 8 4 5 9 10 7

1 2 3 6 8 4 5 9 10 7

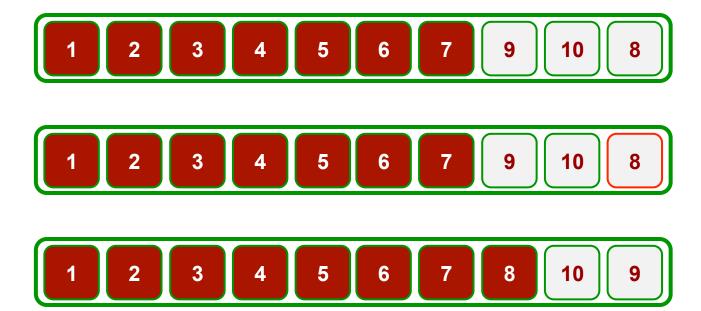
1 2 3 6 8 4 5 9 10 7

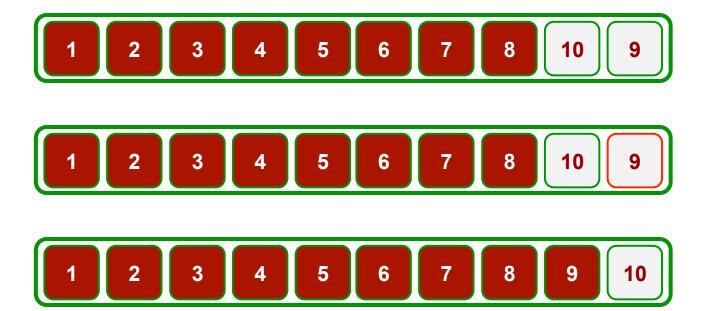
1 2 3 4 8 6 5 9 10 7

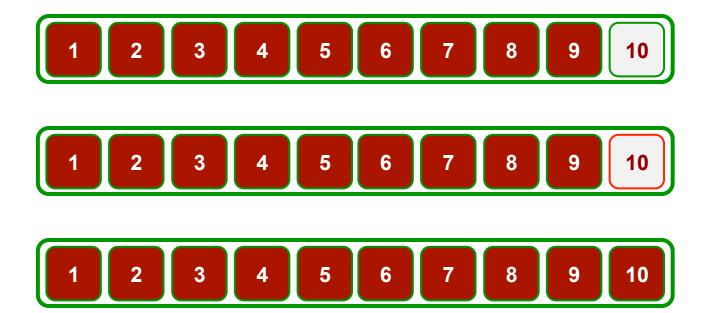
1 2 3 4 8 6 5 9 10 7 1 2 3 4 8 6 5 9 10 7 1 2 3 4 5 6 8 9 10 7

1 2 3 4 5 6 8 9 10 7  $\begin{bmatrix} 1 & 2 & 3 & 4 & 5 & 6 \end{bmatrix} \begin{bmatrix} 6 & 8 \end{bmatrix} \begin{bmatrix} 9 & 10 \end{bmatrix} \begin{bmatrix} 7 & 10 \end{bmatrix}$ 1 2 3 4 5 6 8 9 10 7

1 2 3 4 5 6 8 9 10 7  $\begin{bmatrix} 1 & 2 & 3 & 4 & 5 & 6 & 8 \end{bmatrix} \begin{bmatrix} 9 & 10 & 7 \end{bmatrix}$ 1 2 3 4 5 6 7 9 10 8







```
#include <stdio.h>
int main() {
    int d[10] = {6,7,3,1,8,4,5,9,10,2};
    int i,j, en_kucuk_sira;
    for (i = 0; i <= 9; i++)
        printf("%d ", d[i]);
    printf("\n\n");</pre>
```

```
return 0;
}
```

```
#include <stdio.h>
int main() {
    int d[10] = {6,7,3,1,8,4,5,9,10,2};
    int i,j, en_kucuk_sira;
    for (i = 0; i <= 9; i++)
        printf("%d ", d[i]);
    printf("\n\n");
    for ( i = 0; i <= 8; i++) {
        en_kucuk_sira = i;
    }
}</pre>
```

```
en_kucuk_sira
0
```

```
return 0;
```

```
#include <stdio.h>
int main() {
    int d[10] = {6,7,3,1,8,4,5,9,10,2};
    int i,j, en_kucuk_sira;
    for (i = 0; i <= 9; i++)
        printf("%d ", d[i]);
    printf("\n\n");
    for (i = 0; i <= 8; i++) {
        en_kucuk_sira = i;
        for (j = i+1; j <= 9; j++)
        if (d[j] < d[en_kucuk_sira])
        en_kucuk_sira = j;</pre>
```

```
en_kucuk_sira
0

6 7 3 1 8 4 5 9 10 2
```

```
d[j] < d[en_kucuk_sira] (7 < 6)
en_kucuk_sira = j;
```

```
#include <stdio.h>
int main() {
    int d[10] = {6,7,3,1,8,4,5,9,10,2};
    int i,j, en_kucuk_sira;
    for (i = 0; i <= 9; i++)
        printf("%d ", d[i]);
    printf("\n\n");
    for (i = 0; i <= 8; i++) {
        en_kucuk_sira = i;
        for (j = i+1; j <= 9; j++)
        if (d[j] < d[en_kucuk_sira])
        en_kucuk_sira = j;</pre>
```

```
d[j] < d[en_kucuk_sira] (3 < 6)
en_kucuk_sira = j;
```

```
#include <stdio.h>
int main() {
    int d[10] = {6,7,3,1,8,4,5,9,10,2};
    int i,j, en_kucuk_sira;
    for (i = 0; i <= 9; i++)
        printf("%d ", d[i]);
    printf("\n\n");
    for ( i = 0; i <= 8; i++) {
        en_kucuk_sira = i;
        for (j = i+1; j <= 9; j++)
        if (d[j] < d[en_kucuk_sira])
        en_kucuk_sira = j;</pre>
```

```
en_k en_kucuk_sira
3

6 7 3 1 8 4 5 9 10 2
```

```
d[j] < d[en_kucuk_sira] (1 < 3)
en_kucuk_sira = j;</pre>
```

```
#include <stdio.h>
int main() {
  int d[10] = {6,7,3,1,8,4,5,9,10,2};
  int i,j, en_kucuk_sira;
  for (i = 0; i <= 9; i++)
      printf("%d ", d[i]);
  printf("\n\n");
  for (i = 0; i <= 8; i++) {
      en_kucuk_sira = i;
      for (j = i+1; j <= 9; j++)
            if (d[j] < d[en_kucuk_sira])
            en_kucuk_sira = j;
      }
}</pre>
```

```
en_kucuk_sira
3

6 7 3 1 8 4 5 9 10 2
```

```
d[j] < d[en_kucuk_sira] (8 < 1)
en_kucuk_sira = j;</pre>
```

```
#include <stdio.h>
int main() {
    int d[10] = {6,7,3,1,8,4,5,9,10,2};
    int i,j, en_kucuk_sira;
    for (i = 0; i <= 9; i++)
        printf("%d ", d[i]);
    printf("\n\n");
    for ( i = 0; i <= 8; i++) {
        en_kucuk_sira = i;
        for (j = i+1; j <= 9; j++)
            if (d[j] < d[en_kucuk_sira])
            en_kucuk_sira = j;</pre>
```

```
en_kucuk_sira
3

6 7 3 1 8 4 5 9 10 2

j
5
```

```
d[j] < d[en_kucuk_sira] (4 < 1)
en_kucuk_sira = j;</pre>
```

```
#include <stdio.h>
int main() {
    int d[10] = {6,7,3,1,8,4,5,9,10,2};
    int i,j, en_kucuk_sira;
    for (i = 0; i <= 9; i++)
        printf("%d ", d[i]);
    printf("\n\n");
    for ( i = 0; i <= 8; i++) {
        en_kucuk_sira = i;
        for (j = i+1; j <= 9; j++)
        if (d[j] < d[en_kucuk_sira])
        en_kucuk_sira = j;</pre>
```

```
en_kucuk_sira
3

6 7 3 1 8 4 5 9 10 2

j
6
```

```
d[j] < d[en_kucuk_sira] (5 < 1)
en_kucuk_sira = j;</pre>
```

```
#include <stdio.h>
int main() {
    int d[10] = {6,7,3,1,8,4,5,9,10,2};
    int i,j, en_kucuk_sira;
    for (i = 0; i <= 9; i++)
        printf("%d ", d[i]);
    printf("\n\n");
    for ( i = 0; i <= 8; i++) {
        en_kucuk_sira = i;
        for (j = i+1; j <= 9; j++)
        if (d[j] < d[en_kucuk_sira])
        en_kucuk_sira = j;</pre>
```

```
en_kucuk_sira
3

6 7 3 1 8 4 5 9 10 2

j
7
```

```
d[j] < d[en_kucuk_sira] (9 < 1)
en_kucuk_sira = j;
```

```
#include <stdio.h>
int main() {
    int d[10] = {6,7,3,1,8,4,5,9,10,2};
    int i,j, en_kucuk_sira;
    for (i = 0; i <= 9; i++)
        printf("%d ", d[i]);
    printf("\n\n");
    for ( i = 0; i <= 8; i++) {
        en_kucuk_sira = i;
        for (j = i+1; j <= 9; j++)
            if (d[j] < d[en_kucuk_sira])
            en_kucuk_sira = j;</pre>
```

```
en_kucuk_sira
3

6 7 3 1 8 4 5 9 10 2

j
8
```

```
d[j] < d[en_kucuk_sira] (10 < 1)
en_kucuk_sira = j;</pre>
```

```
#include <stdio.h>
int main() {
    int d[10] = {6,7,3,1,8,4,5,9,10,2};
    int i,j, en_kucuk_sira;
    for (i = 0; i <= 9; i++)
        printf("%d ", d[i]);
    printf("\n\n");
    for ( i = 0; i <= 8; i++) {
        en_kucuk_sira = i;
        for (j = i+1; j <= 9; j++)
            if (d[j] < d[en_kucuk_sira])
            en_kucuk_sira = j;
```

```
en_kucuk_sira
3

6 7 3 1 8 4 5 9 10 2

j
9
```

```
d[j] < d[en_kucuk_sira] (2 < 1)
en_kucuk_sira = j;</pre>
```

```
#include <stdio.h>
int main() {
  int d[10] = \{6,7,3,1,8,4,5,9,10,2\};
  int i,j, en_kucuk_sira;
  for (i = 0 ; i \le 9 ; i++)
     printf("%d ", d[i]);
   printf("\n\n");
  for (i = 0; i \le 8; i++)
     en kucuk sira = i;
     for (j = i+1 ; j \le 9 ; j++)
        if (d[j] < d[en kucuk sira])</pre>
           en_kucuk_sira = j;
     int tmp = d[i];
     d[i] = d[en_kucuk_sira];
     d[en_kucuk_sira] = tmp;
```

```
en_kucuk_sira
3

6 7 3 1 8 4 5 9 10 2

j
9
```

```
d[j] < d[en_kucuk_sira] (2 < 1)
en_kucuk_sira = j;</pre>
```

```
#include <stdio.h>
int main() {
  int d[10] = \{6,7,3,1,8,4,5,9,10,2\};
  int i,j, en_kucuk_sira;
  for (i = 0 ; i \le 9 ; i++)
     printf("%d ", d[i]);
   printf("\n\n");
  for (i = 0; i \le 8; i++)
     en kucuk sira = i;
     for (j = i+1 ; j \le 9 ; j++)
        if (d[j] < d[en_kucuk_sira])</pre>
           en_kucuk_sira = j;
     int tmp = d[i];
     d[i] = d[en_kucuk_sira];
     d[en_kucuk_sira] = tmp;
   return 0:
```

```
en_kucuk_sira
3

1 7 3 9 8 4 5 9 10 2

j
9
```

```
d[j] < d[en_kucuk_sira] (2 < 1)
en_kucuk_sira = j;</pre>
```

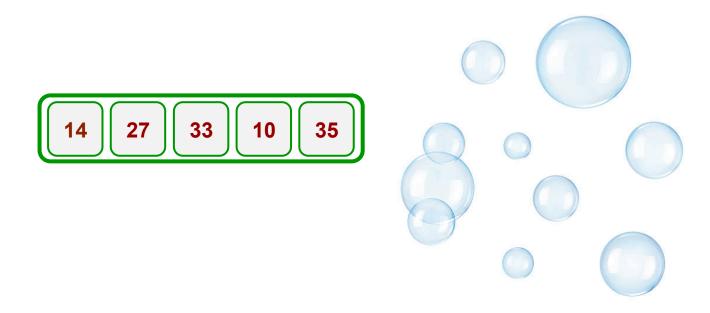
```
#include <stdio.h>
int main() {
  int d[10] = \{6,7,3,1,8,4,5,9,10,2\};
  int i,j, en_kucuk_sira;
  for (i = 0 ; i \le 9 ; i++)
     printf("%d ", d[i]);
   printf("\n\n");
  for (i = 0; i \le 8; i++)
     en kucuk sira = i;
     for (j = i+1 ; j \le 9 ; j++)
        if (d[i] < d[en kucuk sira])</pre>
           en kucuk sira = j;
     int tmp = d[i];
     d[i] = d[en_kucuk_sira];
     d[en_kucuk_sira] = tmp;
     printf("i = %d => ", i);
     for (j = 0 ; j \le 9 ; j++)
        printf("%d ", d[j]);
     printf("\n");
   return 0:
```

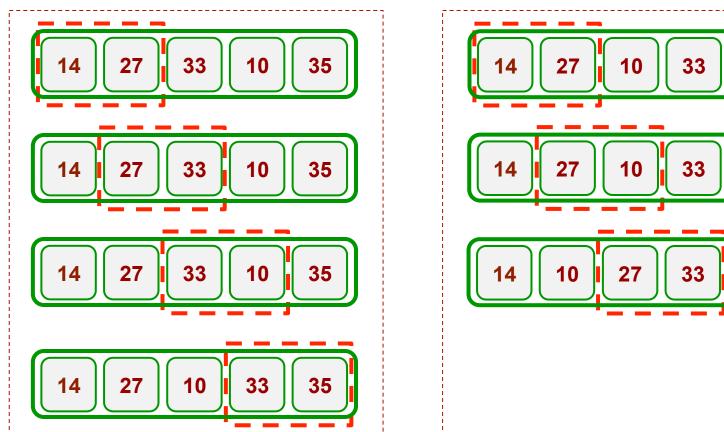
```
en_kucuk_sira
3

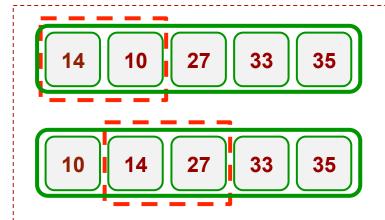
1 7 3 9 8 4 5 9 10 2

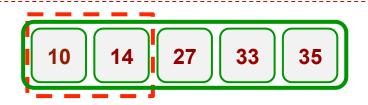
j
9
```

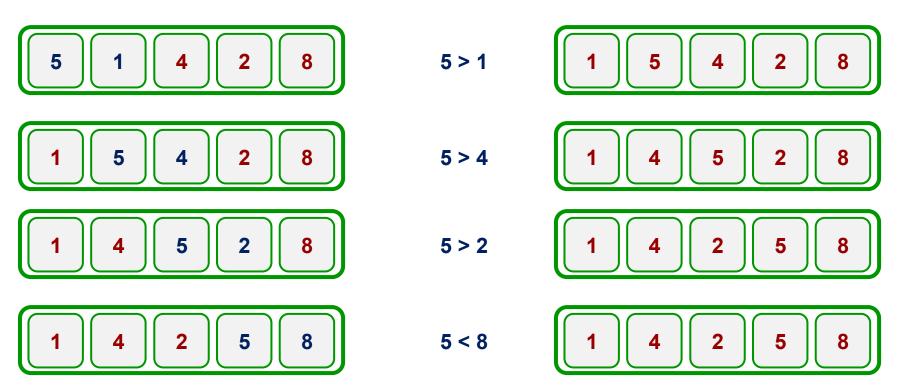
```
d[j] < d[en_kucuk_sira] (2 < 1)
en_kucuk_sira = j;</pre>
```

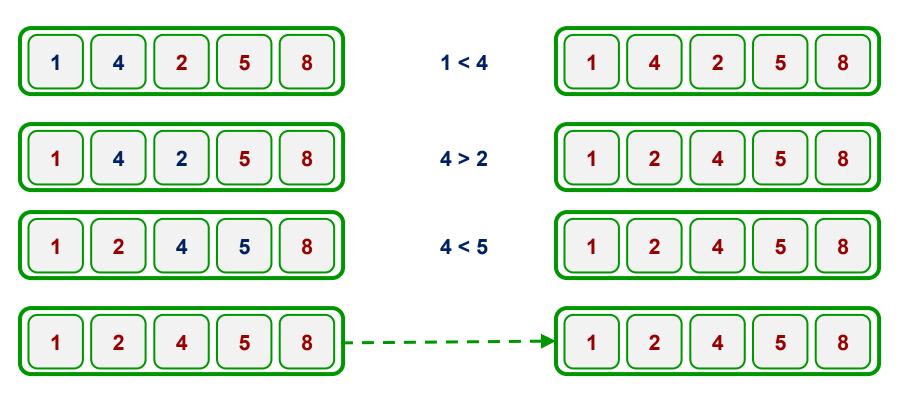


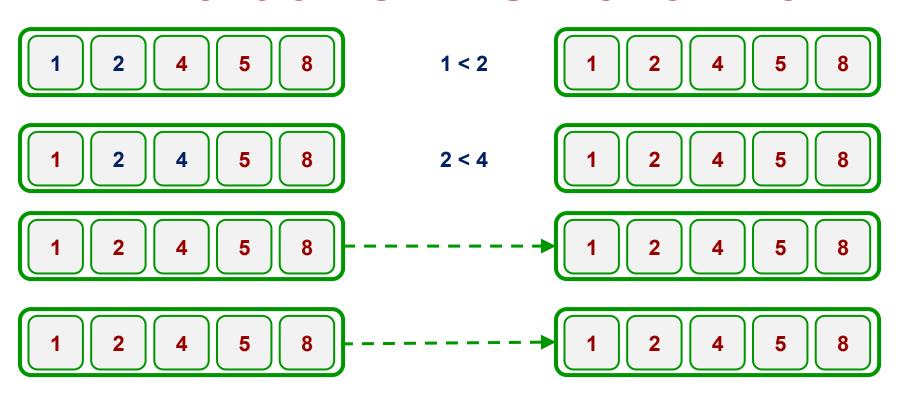


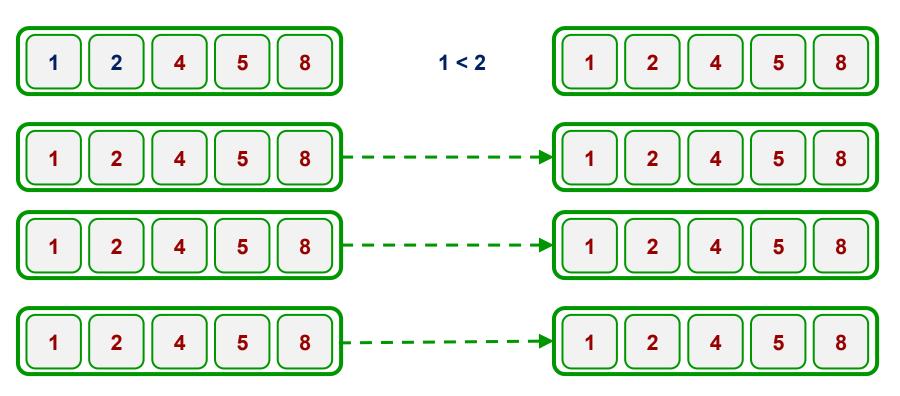








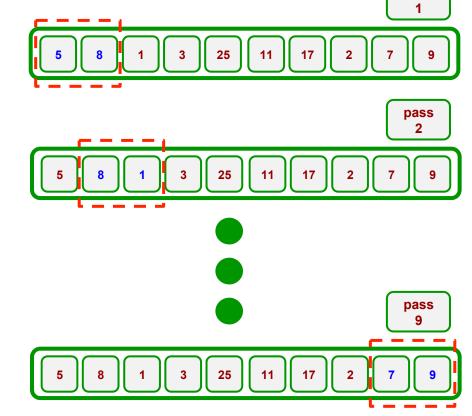




## 

```
5 8 1 3 25 11 17 2 7 9
```

### #include stding of arcine stding of arci



## #include and a part of the sint main() are stained and a part of the sint main() are stained as a part of the sint main of the





### #include and a station and a s

```
mov 0 pass 1 5 8 1 3 25 11 17 2 7 9
```

### #include and a part of the sint main() are also are also as a second a seco

```
int pass, mov;
                int tmp;
                printf("sirasiz hali:\n");
                for (i = 0 ; i < 10 ; i++)
                                printf("%d ", n[i]);
                printf("\n");
                for ( pass=1 ; pass < 10 ; pass++ ) {
                               for (mov=0; mov < 10-1; mov++) {
                                                if
(n[mov] > n[mov+1])
                tmp = n[mov];
                n[mov] = n[mov+1];
                n[mov+1] = tmp;
                printf("sirali hali:\n");
                for (i = 0; i < 10; i++)
                                printf("%d ", n[i]);
                nrintf("\n"):
```



# #include <std Kabarcık sıralama & fonk: ----

int main() {

int d[10] = {5, 8, 1, 3, 25, 11, 17, 2, 7, 9}; int i:

# #include <std Kabarcık sıralama & fonk: ----



int main() {

int d[10] = {5, 8, 1, 3, 25, 11, 17, 2, 7, 9};
int i;
bubble\_sort(d, 10);

# #include <std abarcik siralama & void bubble\_sort(int d[], int N) { fonk: fonk:

```
}
int main() {
    int d[10] = {5, 8, 1, 3, 25, 11, 17, 2, 7, 9};
    int i;
    bubble_sort(d, 10);
```



## #include <std >std >a Darcik Siralama & void bubble\_sort(int d[], int N) {

```
}

int main() {
    int d[10] = {5, 8, 1, 3, 25, 11, 17, 2, 7, 9};
    int i;
    bubble_sort(d, 10);
```



## #include <std >std >a Darcik Siralama & void bubble\_sort(int d[], int N) {

```
d bubble_sort(int d[j, int N) {
    int pass, mov, tmp;
    for ( pass=1 ; pass < N pass++ ) {
        for (mov=0 ; rot < N ; mov+)
```

```
}
}
int main() {

int d[10] = {5, 8, 1, 3, 25, 11, 17, 2, 7, 9};
int i;
bubble_sort(d, 10);
```



## #include <std a local color and a local color and a local color and bubble\_sort(int d[], int N) {

```
int pass, mov, tmp;
               for ( pass=1 ; pass < N _ pass++ ) {
(d[mov] > d[mov+1])
               tmp = d[mov];
               d[mov] = d[mov+1];
               d[mov+1] = tmp;
int main() {
               int d[10] = \{5, 8, 1, 3, 25, 11, 17, 2, 7, 9\};
               int i;
               bubble_sort(d, 10);
```

## #include <std A a Darcik Siralama & void bubble\_sort(int d[], int N) {

```
int pass, mov, tmp;
               for ( pass=1 ; pass < N _ pass++ ) {
(d[mov] > d[mov+1])
               tmp = d[mov];
               d[mov] = d[mov+1];
               d[mov+1] = tmp;
int main() {
               int d[10] = \{5, 8, 1, 3, 25, 11, 17, 2, 7, 9\};
               int i;
                bubble_sort(d, 10);
                printf("sirali hali:\n");
               for (i = 0 ; i < 10 ; i++)
                               printf("%d ", d[i]);
                printf("\n");
```

```
#include <stdio.h>
void bubble_sort(int d[], int N) {
             kabarcık sıralama & arama
                      d[i] = d[i+1];
                      d[i+1] = tmp;
int ikili ara(int dizi[], int N, int aranan);
int main() {
 int d[10] = {5, 8, 1, 3, 25, 11, 17, 2, 7, 9};
 int i:
 bubble sort(d, 10);
 printf("sirali hali:\n"):
 for (i = 0 ; i < 10 ; i++)
   printf("%d ", d[i]);
 printf("\n"):
 while (1) {
   int aranan;
   printf("aranacak elemani giriniz:"):
   scanf("%d", &aranan);
   int yer = ikili ara(d, 10, aranan);
   if (ver == -1)
     printf("%d dizide yok\n", aranan);
      printf("%d'nin yeri: %d\n", aranan, yer);
                      return 0:
int ikili ara(int dizi[], int N, int aranan) {
 int bas = 0;
 int son = N-1:
 int orta;
 while (bas <= son) {
   orta = (bas + son) / 2;
   if (dizi[orta] == aranan)
     return orta;
    else if (dizi[orta] > aranan)
     son = orta - 1;
   else
      bas = orta + 1;
 return -1:
```



#### Sorular

