```
#include <stdio.h>
int ternarySearch(int l, int r, int key, int ar[])
{
if (r >= l) {
int mid1 = l + (r - l) / 3;
int mid2 = r - (r - l) / 3;
if (ar[mid1] == key) {
return mid1;
}
if (ar[mid2] == key) {
return mid2;
}
if (key < ar[mid1]) {
return ternarySearch(l, mid1 - 1, key, ar);
}
else if (key > ar[mid2]) {
return ternarySearch(mid2 + 1, r, key, ar);
}
else {
return ternarySearch(mid1 + 1, mid2 - 1, key,
ar);
 }
 }
return -1;
}
int main()
{
int l, r, p, key;
int ar[] = { 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 };
l = 0;
```

```
int ar[] = { 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 };
l = 0;
r = 9;
key = 5;
p = ternarySearch(l, r, key, ar);
printf("Index of %d is %d\n", key, p);
key = 50;
p = ternarySearch(l, r, key, ar);
printf("Index of %d is %d", key, p);
}
```