EXPERIMENT-9

TO FIND BINARY SEARCH

PROGRAM:

```python
def binary_search(arr, key):
    left = 0
    right = len(arr) - 1

    while left <= right:
        mid = (left + right) // 2
        if arr[mid] == key:
            return mid
        elif arr[mid] < key:
            left = mid + 1
        else:
            right = mid - 1
    return -1
arr = [3, 4, 6, -9, 10, 8, 9, 30]
arr.sort()
key = 10
index = binary_search(arr, key)
if index != -1:
    print(f"Element {key} is found at position {index}")
else:
    print(f"Element {key} is not found in the array")
```

OUTPUT:

```
Element 10 is found at position 6

=== Code Execution Successful ===
```