1. def binary_search(numbers, key):
    assert type(numbers) is list, "list arg must be a list."
    mid = 0; low = 0; high = len(numbers) - 1
    while high >= low:
        mid = (high + low) // 2
        if numbers[mid] < key:
            low = mid + 1
        elif numbers[mid] > key:
            high = mid - 1
        else:
            return mid # not found
    return -1

2. def main():
    numbers = [3, 4, 5, 6, 7, 8, 9]
    key = int(input("Enter a value: "))
    low = 0
    high = len(numbers) - 1
    key_index = binary_search(numbers, key)
    if key_index == -1:
        print("key, was not found")
    else:
        print("key, "at index, key_index)

3. main()
```plaintext
26. main()
    printf("found", key, "at index", key_index)
    else:
        printf("key was not found")
        if key_index == -1:
            key_index = binarySearch(numbers, key)

25. def main():

24.     numbers = [2, 4, 7, 9, 10, 11, 32, 45, 87, 99, 100]

23.     key = input("Enter a value: ")

22.     if key < [mid] or key > [mid + 1]:
21.         # not found
20.         return -1
19.     else:
18.         return mid
17.     def main():
16.         numbers = [2, 4, 7, 9, 10, 11, 32, 45, 87, 99, 100]
15.         key = input("Enter a value: ")
14.         if key < [mid] or key > [mid + 1]:
13.             # not found
12.             return -1
11.         else:
10.             return mid
9.             def main():
8.                 numbers = [2, 4, 7, 9, 10, 11, 32, 45, 87, 99, 100]
7.                 key = input("Enter a value: ")
6.                 if key < [mid] or key > [mid + 1]:
5.                     # not found
4.                     return -1
3.                     mid = 0;
2.                     assert type(numbers) is list,
1.                     "list arg must be a list"
def binary_search(numbers, key):
    low = 0
    high = len(numbers) - 1
    while low <= high:
        mid = (low + high) // 2
        if numbers[mid] == key:
            return mid
        elif key < numbers[mid]:
            high = mid - 1
        else:
            low = mid + 1
    return -1

def main():
    numbers = [2, 4, 7, 9, 10, 11, 12, 15, 25, 50, 59, 62, 72, 83, 89, 99, 100]
    key = int(input("Enter a value: "))
    index = binary_search(numbers, key)
    if index == -1:
        print("Key was not found")
    else:
        print("Found", key, "at index", index)