

# 22103153 SRAJAN RASTOGI

## EVAL-2

```
shop = ["fruits", "wheat", "soaps", "utensils"]
```

```
def add_item(item):  
    if item not in shop:  
        shop.append(item)  
    else:  
        print("Item already present")
```

```
def remove_item(item):  
    if item in shop:  
        shop.remove(item)  
        print("Item removed successfully")  
    else:  
        print("Item not present")
```

```
def search_item(item):  
    return item in shop
```

```
def bsearch(l, r, item):  
    if l <= r:  
        m = (l + r) // 2  
        if shop[m] == item:  
            return True  
        elif shop[m] < item:  
            return bsearch(m + 1, r, item)  
        else:  
            return bsearch(l, m - 1, item)  
    return False
```

```
def display():  
    print(shop)
```

```
ip1 = input("Item to be added: ").strip()  
add_item(ip1)  
display()
```

```
ip2 = input("Item to be deleted: ").strip()
```

```
remove_item(ip2)  
display()
```

```
ip3 = input("Item to be searched: ").strip()
```

```
shop.sort()  
if bsearch(0, len(shop) - 1, ip3):  
    print("Item found in the shop")  
else:  
    print("Item not found in the shop")
```