//Question 1: Scalability Issue

```
#include <stdio.h>
#include <stdlib.h>
#include<string.h>
int main() {
    int i,no_of_users,user_count=0;
    char username[20],password[20];
    while(user_count<2){                              //<500000
    printf("\n----- A M A Z O N -----\n");
    printf("\nEnter your login Credentials:");
    printf("\nUsername (email): ");
    scanf("%s",username);
    if(strchr(username,'@')==NULL)
        printf("\nEnter valid email ID!\n");
    if(strchr(username,'@')!=NULL){
    printf("Password: ");
    scanf("%s",password);
    if(username!=NULL && password!=NULL){
         user_count++;
        printf("Login Successful!\n");
        }
    }

    }

    return 0;
}
```

//Amazon Inventory Management

```
#include <stdio.h>
#include <stdlib.h>

#define WAREHOUSE 10

int main() {
    int i;
    int *capacity;
    capacity = (int *)malloc(WAREHOUSE * sizeof(int));

    if (capacity == NULL) {
        printf("Memory allocation failed!\n");
        return 1;
    }
    for (i = 0; i < WAREHOUSE; i++) {
        printf("\nEnter maximum capacity of warehouse %d: ", i + 1);
        scanf("%d", &capacity[i]);
    }
    printf("\nWarehouse Capacities:\n");
    for (i = 0; i < WAREHOUSE; i++) {
        printf("Warehouse %d: %d units\n", i + 1, capacity[i]);
    }
    free(capacity);

    return 0;
}
```