1. **Program to display the count of maximum price of a stock occur in a day.**

```
#include <stdio.h>
#include <stdlib.h>
int main() {
    int i;
    int n,price[i];
    printf("Enter the number of stock prices: ");
    scanf("%d", &n);
    printf("Enter the stock prices:\n");
    for (int i = 0; i < n; i++) {
        scanf("%d", &price[i]);
    }

    int maxP = price[0];
    int count = 0;
    for (int i = 1; i < n; i++) {
        if (price[i] > maxP) {
            maxP = price[i];
        }
    }
    for (int i = 0; i < n; i++) {
        if (price[i] == maxP) {
            count++;
        }
    }

    printf("Maximum price: %d\n", maxP);
    printf("Count of maximum price: %d\n", count);
      return 0;
}
```

2.Faulty sensor detection

```
include<stdio.h>
int main()
{
    int temp[10]={25,30,28,55,32,29};
    int i;
    int f_sen=0;
     printf("Sensor Readings:\n");
    for(i=0;i<10;i++)
{
        printf("Sensor %d: %d degrees Celsius\n",i+1,temp[i]);
    }
```

```
 for(i=0;i<10;i++)
{
       if(temp[i]>50)
{
           printf("Faulty sensor detected",i+1,temp[i]);
           f_sen=1;
       }
   }

   if (f_sen==0)
{
       printf("No faulty sensors detected");
   }

   return 0;
}
```

3.Duplicate entry check

```
#include <stdio.h>
int main() {
    int n, i;
    int flag=0;
    printf("Enter the number of registrations: ");
    scanf("%d", &n);

    int a[i];
    printf("Enter the registrations:\n");
    for (i = 0; i < n; i++) {
        scanf("%d", &a[i]);
    }
    int id;
    printf("new user entry\n");
    printf("enter the new user\n");
    scanf("%d",&id);
   for(i=0;i<n;i++)
{
    if(id == a[i])
    {
        printf("the user already exists\n");
        flag=1;
        break;
    }
    }
    if(flag==0)
    {
        printf("the user is available for registration\n");
```

```
    }
    return 0;
}
```