

Answer - Economics students (b)

```
#include <stdio.h>
#include <stdlib.h>
#include <ctype.h>
#include <string.h>
#include <math.h>

int main(int argc, char *argv[])
{
    int n,x;
    x=scanf("%d",&n);
    if(x<0)
    {
        return 1;
    }
    float marks[n];
    for(int i=0;i<n;i++)
    {
        float y;
        x=scanf("%f",&y);
        if(x<0)
        {
            return 1;
        }
        if(y>100 || y<0)
        {
            printf("INVALID INPUT");
            return 0;
        }
        else
        {
            marks[i]=y;
        }
    }
    double mean=0,variance=0,standard_deviation;
    for(int i=0;i<n;i++)
    {
        mean=(mean+marks[i]);
    }
    mean=mean/n;
    for(int i=0;i<n;i++)
    {
        variance=(variance+((marks[i]-mean)*(marks[i]-mean)));
    }
    standard_deviation=sqrt(variance)/sqrt(n);
    printf("%f %f %f",mean,variance/n,standard_deviation);
}
```