

~\Desktop\CPROGRAMMES\assignment2.c

```
1  #include<stdio.h>
2  #include<math.h>
3  int main(){
4      //Q1
5      int n,smarks[n];
6
7      for(int i=0;i<n;i++){
8          printf("enter the marks of student %d:",i+1);
9          scanf("%d",&smarks[i]);
10     }
11     for(int i=0;i<n;i++){
12         printf("updated marks of student:%d",i+1);
13         smarks[i]=smarks[i]+5;
14         printf("%d\n",smarks[i]);
15
16
17
18     }
19     //Q2
20     int m,marks[80];
21     printf("how many students are there:");
22     scanf("%d",&m);
23     for(int i=0;i<m;i++){
24         printf("enter marks of student %d:",i+1);
25         scanf("%d",&marks[i]);
26     }
27
28     for(int i=0;i<m;i++){
29         printf("The grade of student %d is:",i+1);
30         if(marks[i]>=75){
31             printf("A GRADE\n");
32         }
33         else if(marks[i]>=60 && marks[i]<=74){
34             printf("B GRADE\n");
35         }
36         else if(marks[i]>=40 && marks[i]<=59){
37             printf("C GRADE\n");
38         }
39         else{
40             printf("D GRADE\n");
41         }
42
43     }
44     //Q3
45     for(int i=0;i<m;i++){
46         if(marks[i]==99){
47             printf("The first 99 marks are secured by student %d\n",i+1);
48             break;
49         }
50     }
51     //Q4
```

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52     int count=0;
53     for(int i=0;i<m;i++){
54         if(marks[i]==99){
55             printf("student %d secured 99 marks\n");
56             count++;
57         }
58     }
59     printf("The number of students who secured 99 marks are:%d\n",count);
60     //Q5
61     int sum=0;
62     for(int i=0;i<m;i++){
63         sum=sum+masks[i];
64     }
65     printf("The sum of scores is:%d\n",sum);
66     //Q6
67     float avg;
68     avg=(float)sum/m;
69     printf("The average score is:%f\n",avg);
70     //Q7
71     for(int i=0;i<m;i++){
72         if(marks[i]%2==0){
73             printf("Marks scored by student %d is even\n",i+1);
74         }
75         else{
76             printf("Marks scored by student %d is odd\n",i+1);
77         }
78     }
79     //Q8
80     int max,min;
81     for(int i=0;i<m;i++){
82         if(marks[i]<=marks[0]&&marks[i]<=marks[i-1]){
83             min=masks[i];
84         }
85     }
86     for(int i=0;i<m;i++){
87         if(marks[i]>=marks[0]&&marks[i]>=marks[i-1]){
88             max=masks[i];
89         }
90     }
91     printf("maximum marks:%d\nminimum marks:%d\n",max,min);
92     //Q9
93     int a;
94     printf("enter the length of your array");
95     scanf("%d",&a);
96     int arr[a];
97     for(int i=0;i<a;i++){
98         printf("enter the element %d:",i+1);
99         scanf("%d",&arr[i]);
100    }
101    printf("the elements are:\n");
102    for(int i=0;i<a;i++){
103        if(i==0){
104            if(arr[0]>arr[1]){
105                printf("%d\n",arr[0]);
```

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106         }
107
108     }
109     else if(arr[i]>arr[i-1]&&arr[i]>arr[i+1]){
110         printf("%d\n",arr[i]);
111     }
112 }
113 //Q10
114 int b,p=0,f;
115 printf("enter the length of the array");
116 scanf("%d",&b);
117 int c[b];
118 for(int i=0;i<b;i++){
119     printf("enter the element %d",i+1);
120     scanf("%d",&c[i]);
121 }
122 for(int i=0;i<b;i++){
123     for(int j=2;j<c[i];j++)
124     {
125         if(c[i]%j==0){
126             f=1;
127         }
128         else{
129             f=0;
130         }
131     }
132     if(f==0){
133         p++;
134     }
135 }
136 printf("there are %d prime numbers",p);
137
138
139
140
141
142
143
144
145
146 }
147
148
149
150
```