



Daffodil
International
University

Daffodil International University

Department of Software Engineering

Lab Report

Course name: Structured Programming Lab

Course Code: SE 122

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Problem 1:

Code for problem 1:

```
1  #include<stdio.h>
2  int main() {
3      int marks[20];
4      for (int i=0;i<20;i++){
5          scanf("%d",&marks[i]);
6      }
7      int c0=0,c10=0,c20=0,c30=0,c40=0,c50=0,c60=0,c70=0,c80=0,c90=0,c99=0,c100=0;
8      for (int i=0;i<20;i++){
9
10         if (marks[i]>-1 && marks[i]<10)
11             c0=c0+1;
12         else if (marks[i]>9 && marks[i]<20)                //Md.Shamim Ahamed
13             c10=c10+1;                                       //ID: 213-35-775
14         else if (marks[i]>19 && marks[i]<30)
15             c20=c20+1;
16         else if (marks[i]>29 && marks[i]<40)
17             c30=c30+1;
18         else if (marks[i]>39 && marks[i]<40)
19             c40=c40+1;
20         else if (marks[i]>39 && marks[i]<50)
21             c50=c50+1;
22         else if (marks[i]>49 && marks[i]<60)
23             c60=c60+1;
24         else if (marks[i]>59 && marks[i]<70)
25             c70=c70+1;
26         else if (marks[i]>69 && marks[i]<80)
27             c80=c80+1;
28         else if (marks[i]>79 && marks[i]<90)
29             c90=c90+1;
30         else if (marks[i]>89 && marks[i]<100)
31             c99=c99+1;
32         else if (marks[i]==100)
33             c100=c100+1;
34     }
35     printf("Range\tFrequency\n0-9\t%d\n",c0);printf("10-19\t%d\n",c10);
36     printf("20-29\t%d\n",c20);printf("30-39\t%d\n",c30);
37     printf("40-49\t%d\n",c40);printf("50-59\t%d\n",c60);
38     printf("60-69\t%d\n",c70);printf("70-79\t%d\n",c80);
39     printf("80-89\t%d\n",c90);printf("90-99\t%d\n",c99);
40     printf("100\t%d\n",c100);
41
42     return 0;
43 }
44
```

Output:

```
"C:\Users\Fantasy Computer\Desktop\Cprogramming\lab report01.exe"
43 65 51 27 79 11 56 61 82 09 25 36 07 49 55 63 74 81 49 37
Range    Frequency
0-9      2
10-19    1
20-29    2
30-39    2
40-49    0
50-59    3
60-69    3
70-79    2
80-89    2
90-99    0
100      0
:
Process returned 0 (0x0)   execution time : 44.103 s
Press any key to continue.
```

Problem 2:

Code for problem 2:

```
1  #include <stdio.h>
2  #include <string.h>
3  #include <stdlib.h>
4  int main() {
5      int i, j, n;
6      char str[100][100], s[100];
7
8      scanf("%d", &n);
9
10     for (i = 0; i < n; i++) {
11         scanf("%s", str[i]);
12     }
13     for (i = 0; i < n; i++) {
14         for (j = i + 1; j < n; j++)
15         {
16             if (strcmp(str[i], str[j]) > 0) { //Md. Shamim Ahamed
17                 strcpy(s, str[i]);           //ID: 213-35-775
18                 strcpy(str[i], str[j]);
19                 strcpy(str[j], s);
20             }
21         }
22     }
23     for (i = 0; i < n; i++) {
24         printf("%s ", str[i]);
25     }
26     return 0;
27 }
```

Output:

```
"C:\Users\Fantasy Computer\Desktop\Cprogramming\lab report02.exe"
3
Dhaka Chittagong Bogura
Bogura Chittagong Dhaka
Process returned 0 (0x0)   execution time : 5.104 s
Press any key to continue.
```

Problem 3:

Code for problem 3:

```
1  #include <stdio.h>
2
3  int fact(int n)
4  {
5      int i,f=1;
6      for(i=1; i<=n; i++)
7      {
8          f=f*i;
9      }
10     return f;
11 }                                     //Md.Shamim Ahamed
12                                     //ID: 213-35-775
13 int main()
14 {
15     int no,factorial;
16
17     scanf("%d",&no);
18
19     factorial=fact(no);
20     printf("%d\n",factorial);
21     return 0;
22 }
23
24
```

Output:

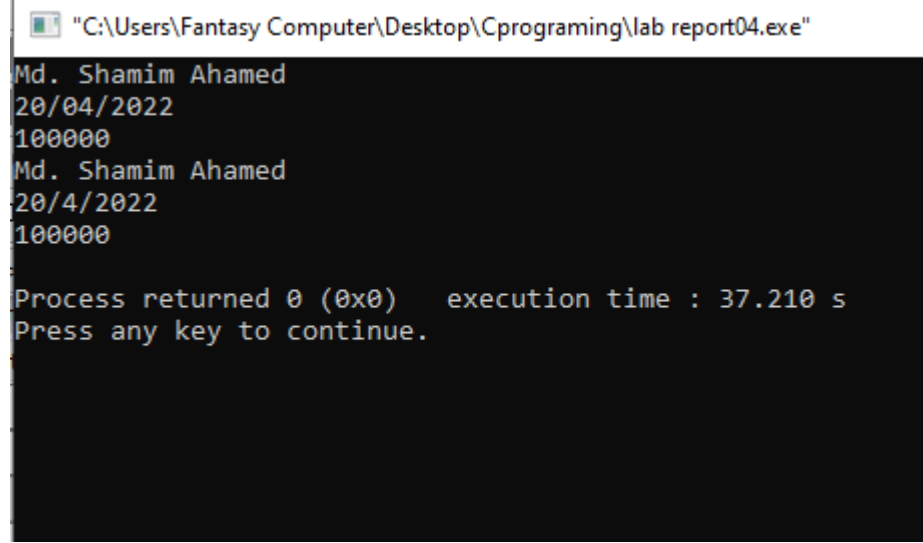
```
"C:\Users\Fantasy Computer\Desktop\Cprogramming\lab report proble 03.exe"
5
120
Process returned 0 (0x0)   execution time : 1.875 s
Press any key to continue.
```

Problem 4:

Code for problem 4:

```
1  #include<stdio.h>
2  int main(){
3      struct employee{
4          char name[100];
5          int day,month,year;
6          int salary;           //Md. Shmaim Ahamed
7                                //ID: 213-35-775
8      };
9      struct employee person1;
10     scanf("%s\n",person1.name);
11     scanf("%d/%d/%d",&person1.day,&person1.month,&person1.year);
12     scanf("%d",&person1.salary);
13
14     printf("%s\n",person1.name);
15     printf("%d/%d/%d\n",person1.day,person1.month,person1.year);
16     printf("%d\n",person1.salary);
17
18     return 0;
19 }
20
```

Output:



```
"C:\Users\Fantasy Computer\Desktop\Cprogramming\lab report04.exe"
Md. Shamim Ahamed
20/04/2022
100000
Md. Shamim Ahamed
20/4/2022
100000

Process returned 0 (0x0)   execution time : 37.210 s
Press any key to continue.
```