

LAB-1

10. WRITE A C PROGRAM TO CALCULATE THE CUT OFF MARK OF A STUDENT USING THE FORMULA.

$$CM = M/2 + P/2 + C/2 + E$$

WHERE

CM = Cut off mark M = Marks in Mathematics out of 200

P = Marks in Physics out of 200

C = Marks in Chemistry out of 200

E = Marks in entrance examination out of 100

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

```
int main()
```

```
{ float cm,m,p,c,e;
```

```
printf("\nenter mathematics marks out of 200=");
```

```
scanf("%f",&m);
```

```
printf("enter physics marks out of 200=");
```

```
scanf("%f",&p);
```

```
printf("enter chemistry marks out of 200=");
```

```
scanf("%f",&c);
```

```
printf("enter entrance examination marks out of 100=");
```

```
scanf("%f",&e);
```

```
printf("\n\nMATHematics=%f\n",m);
```

```
printf("physics=%f\n",p);
```

```
printf("chemistry=%f\n",c);
```

```
printf("entrance examination=%f\n",e);
```

```

cm=m/2+p/2+c/2+e;

printf("\ncut off marks=%f",cm);

}

```

The screenshot shows a Visual Studio Code editor with a C program in a file named 10.c. The program prompts the user to enter marks for mathematics, physics, chemistry, and entrance examination, calculates a weighted average, and prints the result. The terminal on the right shows the program being compiled and executed, with the user entering the values 100, 100, 100, and 100, resulting in a cut-off mark of 250.000000.

```

C 07.c C 08.c C 09.c C 11.c 11.exe C 10.c x v ⚙️ □ ...
clg > C 10.c > main()
1  #include<stdio.h>
2
3  int main()
4  {
5      float cm,m,p,c,e;
6
7      printf("\nenter mathematics marks out of 200=");
8      scanf("%f",&m);
9
10     printf("enter physics marks out of 200=");
11     scanf("%f",&p);
12
13     printf("enter chemistry marks out of 200=");
14     scanf("%f",&c);
15     printf("enter entrance examination marks out of 100=");
16     scanf("%f",&e);
17
18
19
20     printf("\n\nMATHematics=%f\n",m);
21     printf("physics=%f\n",p);
22     printf("chemistry=%f\n",c);
23     printf("enterance examination=%f\n",e);
24
25     cm=m/2+p/2+c/2+e;
26
27     printf("\ncut off marks=%f",cm);
28
29
30 }

```

```

TERMINAL powershell + v □ □ ...
PS C:\Users\Sumit\Desktop\vscode> cd clg
PS C:\Users\Sumit\Desktop\vscode\clg> gcc 10.c
PS C:\Users\Sumit\Desktop\vscode\clg> .\a.exe

enter mathematics marks out of 200=100
enter physics marks out of 200=100
enter chemistry marks out of 200=100
enter entrance examination marks out of 100=100

MATHematics=100.000000
physics=100.000000
chemistry=100.000000
enterance examination=100.000000

cut off marks=250.000000
PS C:\Users\Sumit\Desktop\vscode\clg>

```