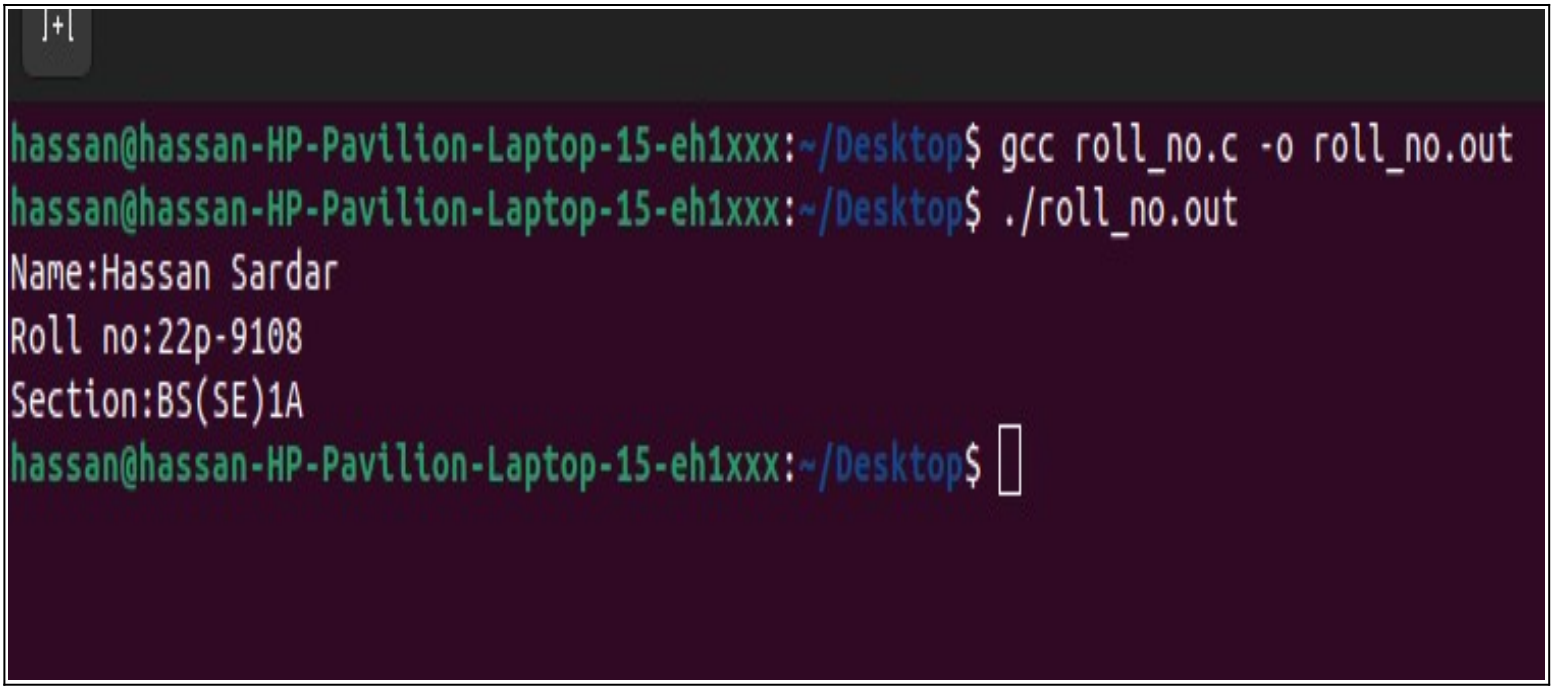
Problem :1

write a C program to print your name , roll no, section in separate lines.

Solution:

```c
#include<stdio.h>
int main()
{
printf("Name:Hassan Sardar\n");
printf("Roll no:22p-9108\n");
printf("Section:BS(SE)1A\n");
return 0;
}
```

output



Problem :2

write a C program that prints the following patterns using printf statement.

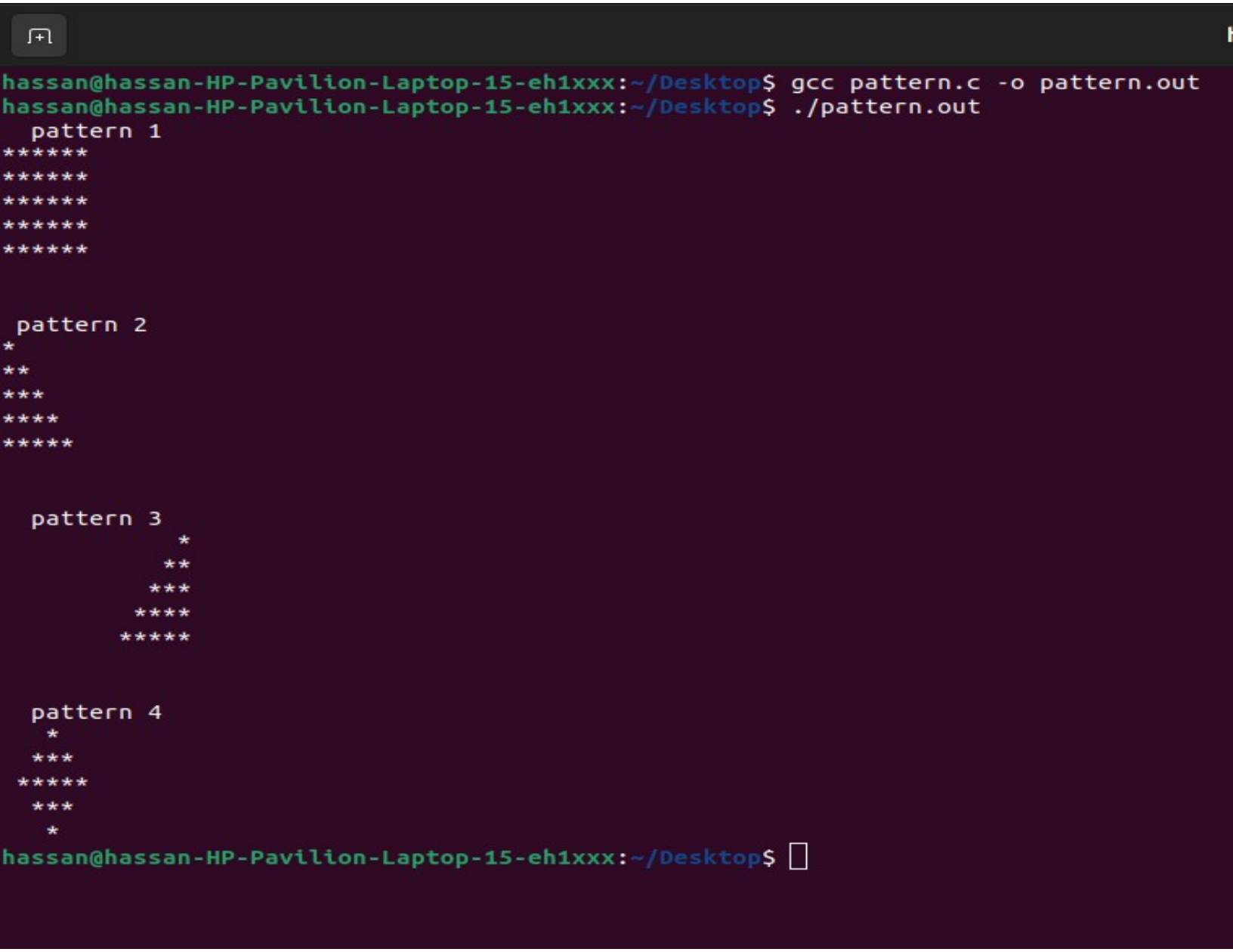
Pattern 1	Pattern 2	Pattern 3	Pattern 4
******	*	*	*
******	**	**	***
******	***	***	*****
******	****	****	***
******	*****	*****	*

Solution:

```
#include<stdio.h>
int main()
{
printf("  pattern 1\n");
printf("*******\n");
printf("*******\n");
printf("*******\n");
printf("*******\n");
printf("*******\n");
printf("\v\v pattern 2\n");
printf("*\n");
printf("**\n");
printf("***\n");
printf("****\n");
printf("*****\n");
```

```
printf("\v\v  pattern 3\n");
printf("\t    *\n");
printf("\t   **\n");
printf("\t  ***\n");
printf("\t ****\n");
printf("\t*****\n");
printf("\v\v  pattern 4\n");
printf("    *\n");
printf("   ***\n");
printf(" *****\n");
printf("   ***\n");
printf("    *\n");
return 0;
}
```

output



Problem:3

write a C program that calculates the area of a rectangle and print the result on screen.

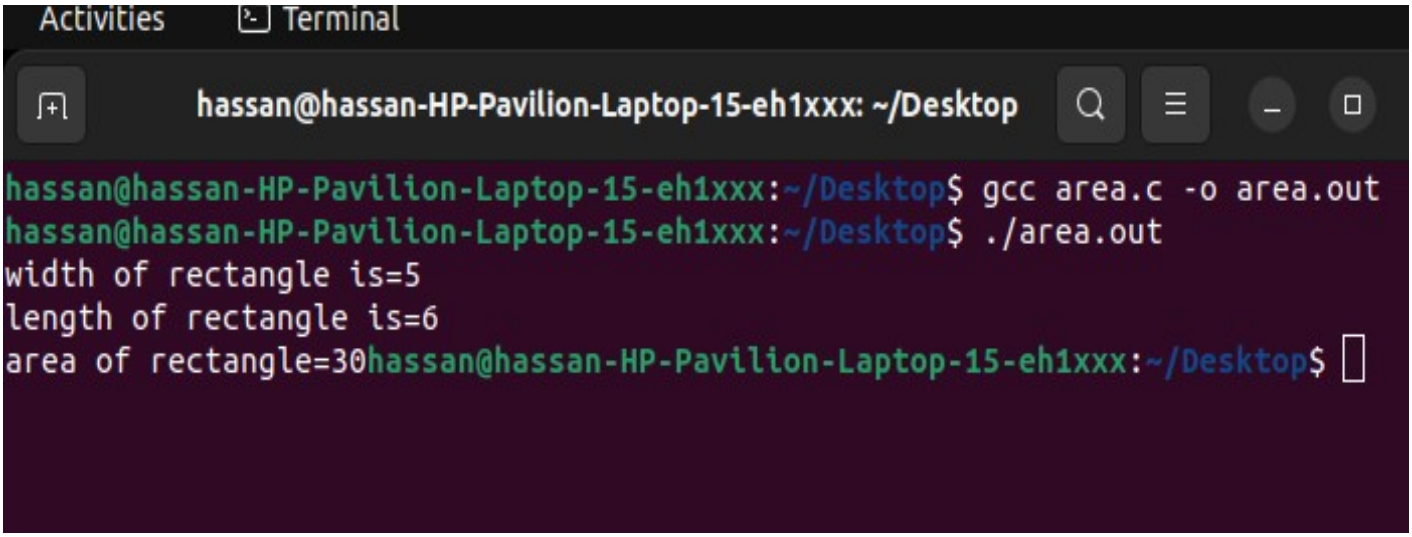
The formula to calculate the area of rectangle is given below:

A=W*l

Solution:

```c
#include <stdio.h>
int main ()
{
int width=5;
int length=6;
int area=width*length;
printf("width of rectangle is=%d\n",width);
printf("length of rectangle is=%d\n",length);
printf("area of rectangle=%d",area);
return 0;
}
```

Output



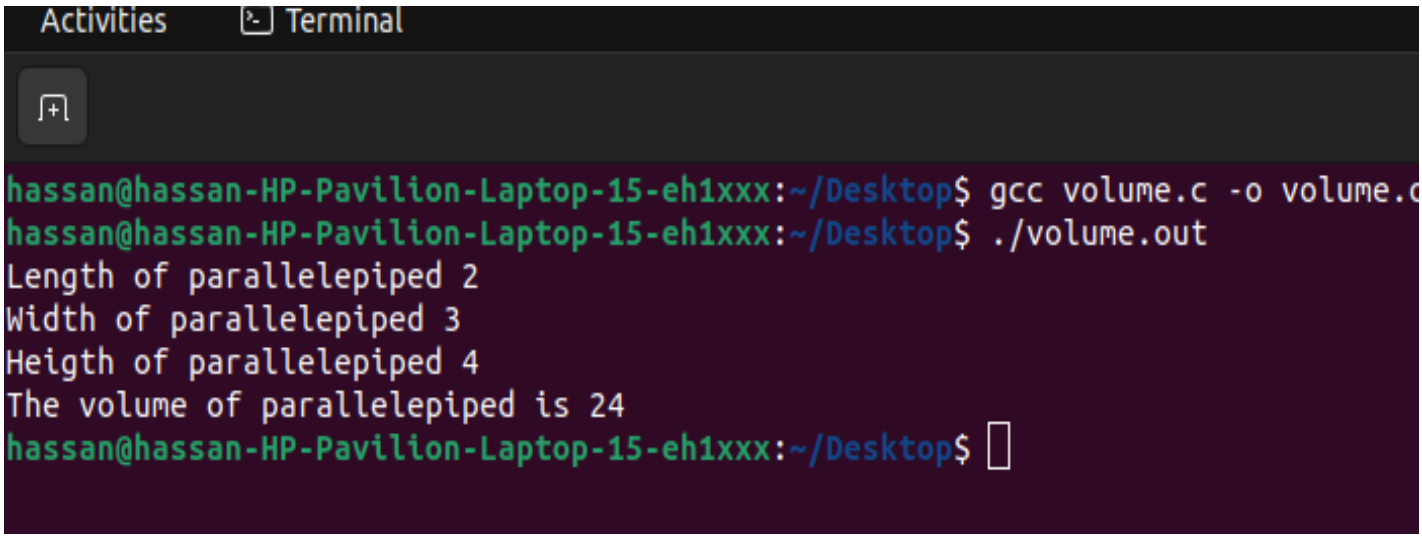
Problem:4

write a program that takes the length, width and height of a parrallelepiped from user and find its volume. The formula to calculate the volume is given below.

Volume=Length*Width*Height
your program should work as shown below.
Enter the Length of parrallelepiped 2
Enter the width of parrallelepiped 3
Enter the height of parrallelepiped 4
the area of parrallelepiped is 24

Solution:

```
#include<stdio.h>
int main()
{
int length=2;
int width=3;
int height=4;
int volume=length*width*height;
printf("Length of parallelepiped %d\n",length);
printf("Width of parallelepiped %d\n",width);
printf("Height of parallelepiped %d\n",height);
printf("The volume of parallelepiped is %d\n",volume);
return 0;
}
```


Activities
Terminal
hassan@hassan-HP-Pavilion-Laptop-15-eh1xxx:~/Desktop$ gcc volume.c -o volume.o
hassan@hassan-HP-Pavilion-Laptop-15-eh1xxx:~/Desktop$ ./volume.out
Length of parallelepiped 2
Width of parallelepiped 3
Heigth of parallelepiped 4
The volume of parallelepiped is 24
hassan@hassan-HP-Pavilion-Laptop-15-eh1xxx:~/Desktop$