ASSIGNMENT

Name : Mubasher Shahzad
Roll No : 22P-9002
Section : BS (AI)

Problem : 1

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

```
#include<stdio.h>
int main (){
    printf("Name   :\tMubasher Shahzad\n");
    printf("Roll No :\t22P-9002\n");
    printf("Section :\tBS(AI)\n");
    return 0;
}
```

```
Mubashers-MacBook-Pro:Assignment mubashershahzad$ clang Name.c -o name.out
Mubashers-MacBook-Pro:Assignment mubashershahzad$ ./name.out
Name    :       Mubasher Shahzad
Roll No :       22P-9002
Section :       BS(AI)
Mubashers-MacBook-Pro:Assignment mubashershahzad$ 
```

Problem: 2

Write a program that prints the following patterns using printf statement.

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

```
    printf("Pattern 2\n*\n**\n***\n****\n*****\n");
    printf("Pattern 3\n   *\n  **\n ***\n ****\n*****\n");
    printf("Pattern 4\n  *\n ***\n*****\n ***\n  *\n");
    return 0;
}
```

Problem: 3

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

```
#include<stdio.h>
int main(){
    float length, width;
    float area;
    printf("Enter the length : ");
```

```c
    scanf("%f", &length);
    printf("Enter the width : ");
    scanf("%f", &width);
    area = length * width;
    printf("Area %.2f = ", area);
    return 0;

}
```

Problem: 4

Write a program that takes the length, width and height of a parallelepiped and finds its volume.

```c
#include<stdio.h>
int main(){
    float length, width, height;
    float volume;
    printf("Enter the length : ");
    scanf("%f", &length);
    printf("Enter the width : ");
    scanf("%f", &width);
    printf("Enter the height : ");
    scanf("%f", &height);

    volume = length * width * height;
    printf("Volume %.2f = ", volume);
```

```
    return 0;

}
```

```
Mubashers-MacBook-Pro:Assignment mubashershahzad$ clang Volume.c -o volume.out
Mubashers-MacBook-Pro:Assignment mubashershahzad$ ./volume.out
Enter the length : 10
Enter the width : 10
Enter the height : 15
Volume 1500.00 = Mubashers-MacBook-Pro:Assignment mubashershahzad$ ▌
```