



Lab Report - 02

SE1012 – Programming methodology

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Activity 1:

```
#include<stdio.h>
//Activity 1
int main() {
    /*1. */
    printf("Hello Welcome to Sliit \n");

    /*2. */
    printf("This First Line \n This is Second Line\n ");

    /*3. */
    printf("      X      \n ");
    printf("    X  X      \n ");
    printf("  X    X \n ");
    printf("    X    X \n ");
    printf("  X      X \n ");
    printf("    X    X \n ");
    printf("  X      X \n ");
    printf("    X  X      \n ");
    printf("      X      \n ");

    return 0;
}
```



```
it23426108@MLBVDI-LNN-0031:~$ vim Lab02.c
it23426108@MLBVDI-LNN-0031:~$ gcc Lab02.c -o Lab02
it23426108@MLBVDI-LNN-0031:~$ ./Lab02
Hello Welcome to Sliit
This First Line
This is Second Line
      X
    X  X
  X    X
    X    X
  X      X
    X    X
  X      X
    X  X
      X
```

Activity 2:

```
/* Activity 2*/  
  
#include <stdio.h>  
  
int main() {  
    float avg, h1, h2, h3;  
    float total, missing_sum, m1, m2;  
  
    printf("Enter the average height of 5 people: ");  
    scanf("%f", &avg);  
  
    printf("Enter the heights of the 3 known people:\n");  
    scanf("%f %f %f", &h1, &h2, &h3);  
  
    total = avg * 5;  
  
    missing_sum = total - (h1 + h2 + h3);  
  
    m1 = m2 = missing_sum / 2.0;  
  
    printf("The missing heights are approximately: %.2f and %.2f\n", m1, m2);  
  
    return 0;  
}
```

```
lt23426108@MLBVDI-LNN-0031:~$ vim Lab020.c  
lt23426108@MLBVDI-LNN-0031:~$ vim Lab020.c  
lt23426108@MLBVDI-LNN-0031:~$ gcc Lab020.c -o Lab020  
lt23426108@MLBVDI-LNN-0031:~$ ./Lab020  
Enter the average height of 5 people: 5.4  
Enter the heights of the 3 known people:  
4.6  
5.5  
7.0  
The missing heights are approximately: 4.45 and 4.45  
lt23426108@MLBVDI-LNN-0031:~$ vim Lab020.c  
lt23426108@MLBVDI-LNN-0031:~$
```

Activity 3:

```
//Activity 3
#include <stdio.h>

int main() {
    float perimeter, length, width;

    printf("Enter the perimeter of the rectangular fence: ");
    scanf("%f", &perimeter);

    // Let length = L, then width = 3/4 * L
    // Perimeter = 2 * (length + width)
    // => perimeter = 2 * (L + 3L/4) = 2 * (7L/4) = (7L/2)
    // => length = (2 * perimeter) / 7
    length = (2 * perimeter) / 7;
    width = (3.0 / 4.0) * length;

    // Output the results
    printf("Length of the fence: %.2f units\n", length);
    printf("Width of the fence: %.2f units\n", width);

    return 0;
}
```

```
it23426108@MLBVDI-LNN-0031:~$ vim Lab0200.c
it23426108@MLBVDI-LNN-0031:~$ gcc Lab0200.c -o Lab0200
it23426108@MLBVDI-LNN-0031:~$ ./Lab0200
Enter the perimeter of the rectangular fence: 3.0
Length of the fence: 0.86 units
Width of the fence: 0.64 units
it23426108@MLBVDI-LNN-0031:~$
```