

Week 1 Lab Tutorial: Basic C Programming – Suggested Solutions

Lab Questions

Q1: (temperature)

```
#include <stdio.h>
int main()
{
    float fahrenheit, celsius;;

    printf("Enter the temperature in degree F: \n");
    scanf("%f", &fahrenheit);
    celsius = (5.0/9.0)*(fahrenheit - 32);
    printf("Converted degree in C: %.2f\n", celsius);
    return 0;
}
```

Q2: (linearSystem)

```
#include <stdio.h>
#include <math.h>
int main()
{
    float a1,b1,c1,a2,b2,c2;
    float x,y;

    printf("Enter the values for a1, b1, c1, a2, b2, c2: \n");
    scanf("%f %f %f %f %f %f", &a1, &b1, &c1, &a2, &b2, &c2);
    // assuming (a1*b2 - a2*b1) != 0
    x = (b2*c1 - b1*c2) / (a1*b2 - a2*b1);
    y = (a1*c2 - a2*c1) / (a1*b2 - a2*b1);
    printf("x = %.2f and y = %.2f\n", x, y);
    return 0;
}
```