

COM 101 - INTRODUCTION TO PROGRAMMING
LAB #1 Solutions

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1- Addition of numbers by prompting user

```
#include <stdlib.h>
#include <stdio.h>
/*
  Addition program (summation.c)
  Author: Feyza Galip
  Date: 10/10/2015
*/

int main() // function main begins program execution
{
    // Beginning of main function

    int integer1 = 0; //first number to be entered by user and initialization
    int integer2 = 0; //second number to be entered by user and initialization
    int sum = 0;     //variable in which sum will be stored and initialization

    printf("*****This program sums two integer numbers*****\n\n"); //inform the
user about the program

    printf("Enter first integer:\n"); //prompt the user to enter integer1
    scanf("%d", &integer1);        //read an integer

    printf("Enter second integer:\n"); //prompt the user to enter integer2
    scanf("%d", &integer2);        //read an integer

    sum = integer1 + integer2;      //assign total to sum

    printf("Summmation of %d and %d is %d\n",integer1,integer2, sum); //print integer1,
integer2 and sum
} //Ending of main function
```

2- Making a Sound by Code

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

/*
Sounding program (sound.c)
Author: Feyza Galip
Date: 10/10/2015
*/

int main() // function main begins program execution
{
    // Beginning of main function
    printf("I am sounding...\a\a\a\a"); //print message and sound
}
//Ending of main function
```

3- Calculating Area of a Square

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

/* This program calculates area of a square
Author: Feyza Galip
Date: 10/10/2015
*/

int main() {

    int edgeLength = 0; //declaration and initialization of edge length of the square
    int area = 0; //declaration and initialization of area

    printf("*****This program calculates area of a square*****\n\n"); //Inform the
user about the program

    printf("Please enter the edge length of the square\n"); //Prompt the user to enter
the input (edge length)
    scanf("%d",&edgeLength); //Get the input (edge length) from the user

    area = edgeLength * edgeLength; //Calculation of are of the square

    printf("Area of the square is %d\n",area); //Print the result (area) on the screen
    return 0;
}
```

4- Calculating Number of Kilometers

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

/*
Addition program (summation.c)
Author: Feyza Galip
Date: 10/10/2015
*/

int main() // function main begins program execution
{    // Beginning of main function

    int velocity = 0; //velocity of the car to be entered by user and initialization
    int time = 0; //time to be entered by user and initialization
    int numberOfKilometers = 0;    //variable in which number of kilometers will be stored and
initialization

        printf("*****This program calculates number of kilometers of a car*****\n\n");
//inform the user about the program

    printf("Please enter the velocity of car (km/h):\n"); //prompt the user to enter the velocity
    scanf("%d", &velocity);    //read the velocity

    printf("Please enter the time (hour):\n"); //prompt the user to enter the time
    scanf("%d", &time);    //read the time

    numberOfKilometers = velocity * time;    //calculate number of kilometers and assign to
numberOfKilometers variable

    printf("Number of kilometers the car travelled is %d\n",numberOfKilometers); //print
numberOfKilometers
}    //Ending of main function
```

5- Drawing a Window

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

```
/*
   Drawing a window
   Author: Feyza Galip
   Date: 10/10/2015
  */
```

```
int main() // function main begins program execution
{         // Beginning of main function
```

```
    printf("*****Just a simple window drawing with C!*****\n\n"); //inform the user
    about the program
```

```
    printf("*****\n*\t*\n*\t*\n*\t*\n*\t*\n*****\n*\t
*\t*\n*\t*\n*\t*\n*\t*\n*****\n"); //printing of the window
```

```
}         //Ending of main function
```