

EEE146 COMPUTER LABORATORY 4

Task 1 - The following code calculates the mean of n input(s) which is given by user.

```
include <iostream>
using namespace std;
int main()
{
    int n ;
    cout << "How many values will you input? ";
    cin >> n;
    double x, mean, total = 0.0;
    for (int i=1; i<=n; ++i)
    {
        cout << "Input value " << i << ": ";
        cin >> x;
        total = total + x;
    }
    mean = total/n;
    cout << "The sum is " << total << endl; cout << "The mean is " << mean << endl;
    system("PAUSE");
    return 0;
}
```

Task 2 - Write a code which prints the following triangular shape: **Note: You have to use for loops**

```
*           1 Star
***        3 Stars
*****    5 Stars
*****    7 Stars
*****    9 Stars
```

Task 3- The following algorithm was attributed by Euclid to find **the greatest common divisor of two integer numbers**, a and b. Write a C program to compute the greatest common divisor of two integers using the this method.

```
S1: Start
S2: Input a and b
S3: If a > b then interchange a and b
    (i.e. do c = a ; a = b ; b = c)
S4: Check if a <= 0 then go to S7
S5: b = b - a
S6: Go to S3
S7: gcd = b (gcd is the return value)
S8: End
```