

## c-sharp

### HW #3

#### Define the following five functions.

1- **power**: This function return power of tow numbers , the function take one parameter , the power of number **2**.

2- **calcShapeArea**: This function calculates and returns the area of a shape (Triangle or Rectangle). The function should take two double arguments (diminutions of the shape) and a single character ('T', or 'R') , if the character argument is 'T' then the area of a triangle with the passed arguments should be calculated and returned. Where the area of a rectangle should be calculated and retuned if the passed char is 'R'. The function should return 0 otherwise.

3- **calcSeriesLog**: This function calculates and returns the value of  **$\log_{10}(12+22+32++42+..... +N2)$** . The function should take one integer argument (N). *Hint: Use loops to calculate the series and the math library to calculate its log.* **Use ref keyword**

4- **drawRectangle**: This function displays at the left margin of the screen a solid rectangle using a specified character. The function should take two integer arguments (the rectangle sides: **width** and **height**) and one character argument (**fill**). For example, if width is 3, height is 2, and fill is '\*', then this function should print the following:

```
***
```

```
***
```

5- **printMenu**: This function displays the following menu at the screen.