CSE108
LW 04

DIAMOND

PART-I (2 Points)

Write a user defined function **int printChars(char ch, int n);** which gets a character and a number as inputs. The function writes the given character n times with a space between each charcter by using a **for** loop. The printChar function should return the number of characters which have succesfully printed. Do not forget to evaluate input parameters, n cannot be a negative number. Do not print anything to screen and return a negative number if there is an invalid input.

printChar('a', 5); /* It should return 10 5 for 'a' and 5 for ' '*/

a a a a a

printChar('*', 3);

* * *

Part-II (2 Points)

Write a main function for printing some special figures to the screen. There are 3 different figures; upper triangle, lower triangle and diamond. You should use a **switch** to select a figure. Read the selection and the height of the space from the user (Do not forget to check inputs!). User will continue drawing until he/she enters a 0 to exit.

[1] Upper Triangle, [2] Lower Triangle, [3] Diamond, [0] Exit: 1
Height: 3

*
* *
* * *

[1] Upper Triangle, [2] Lower Triangle, [3] Diamond, [0] Exit: 2
Height: 5

* * * * *
* * * *
* * *
* *
*

Selection: 3
Height: 5

```
*
* *
* * *
* *
*
```

[1] Upper Triangle, [2] Lower Triangle, [3] Diamond, [0] Exit: 6
Wrong Selection.
[1] Upper Triangle, [2] Lower Triangle, [3] Diamond, [0] Exit:

Part-III (1 Extra Point)

Same as part 2 but the shapes are slightly different. For h=3

```
    *              * * * * *                *
  * * *              * * *                * * *
* * * * *              *                    *
/* Shape-1         Shape-2           Shape-3 */
```