

ACOM1900 – Introduction to Programming Functions Worksheet 2007/8

1. Write a program that prompts the user to enter a number (“num”) and a character (“ch”). The program should print a line of “ch” printed “num” times. For example:

```
tony@myrddin:~$ ./line.py
Enter a number: 5
Enter a character: %
%%%%%%%%
tony@myrddin:~$ ./line.py
Enter a number: 3
Enter a character: *
***
```

2. Amend the program to print a square rather than a line:

```
tony@myrddin:~$ ./square.py
Enter a number: 5
Enter a character: %
%%%%%%%%
%%%%%%%%
%%%%%%%%
%%%%%%%%
%%%%%%%%
%%%%%%%%
%%%%%%%%
```

3. Amend the program again to print a triangle, with the number entered being the height:

```
tony@myrddin:~$ ./triangle.py
Enter a number: 4
Enter a character: $
$
$$
$$$
$$$$
```

4. * Implement a *module* called `drawing` that includes three functions. One should draw a square, one a triangle and one a line. Each function should take two parameters – the size of the shape and the character to be used. The form of the shape to be drawn should be exactly as in the previous three exercises.

Use your module in a simple program that:

- Draws a line of 6 \$ characters.
- Draws a square with each side made of 10 * characters.
- Draws a triangle 5 characters high made up of % characters.