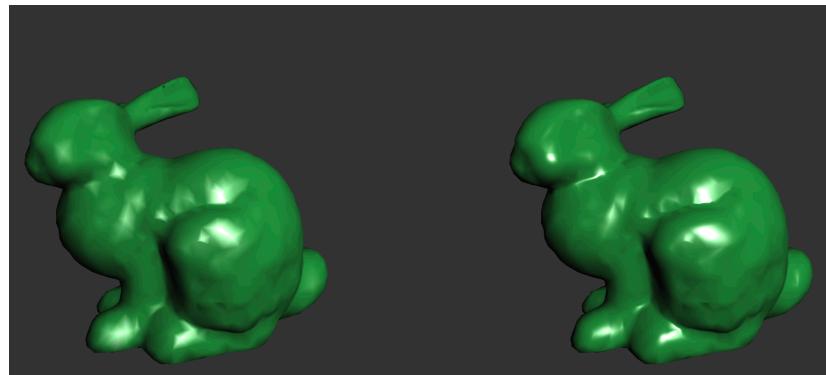


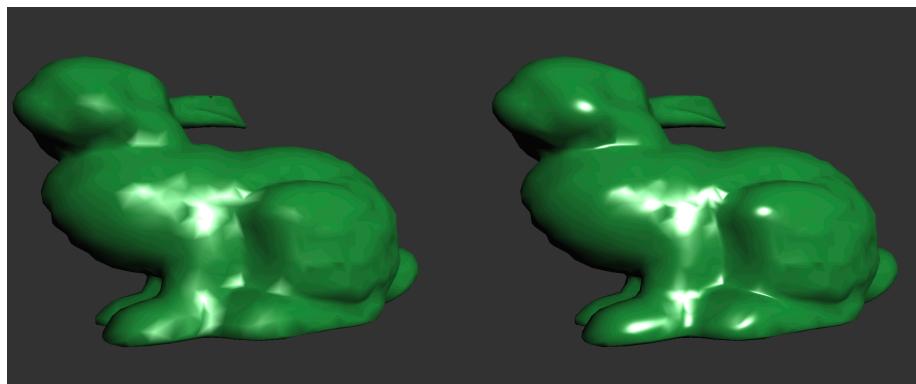
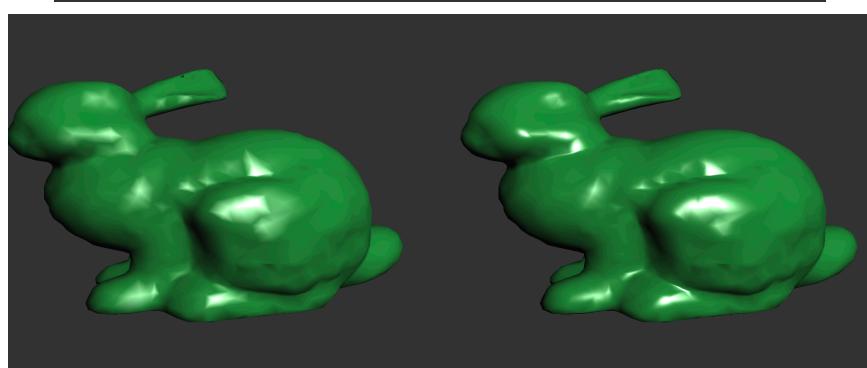
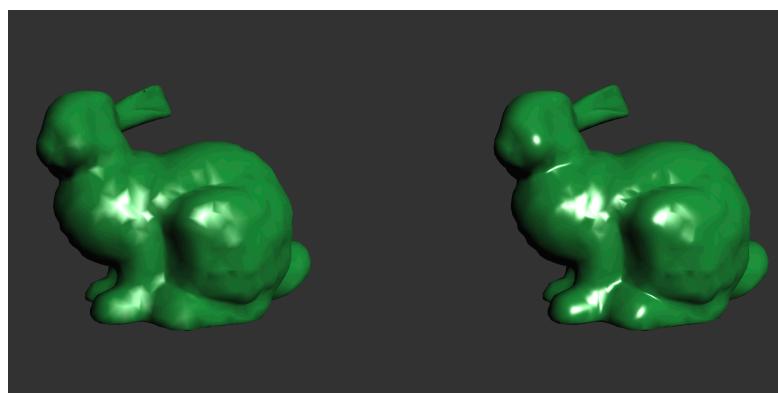
Computer Graphic HW2 Report

1. Directional Light:

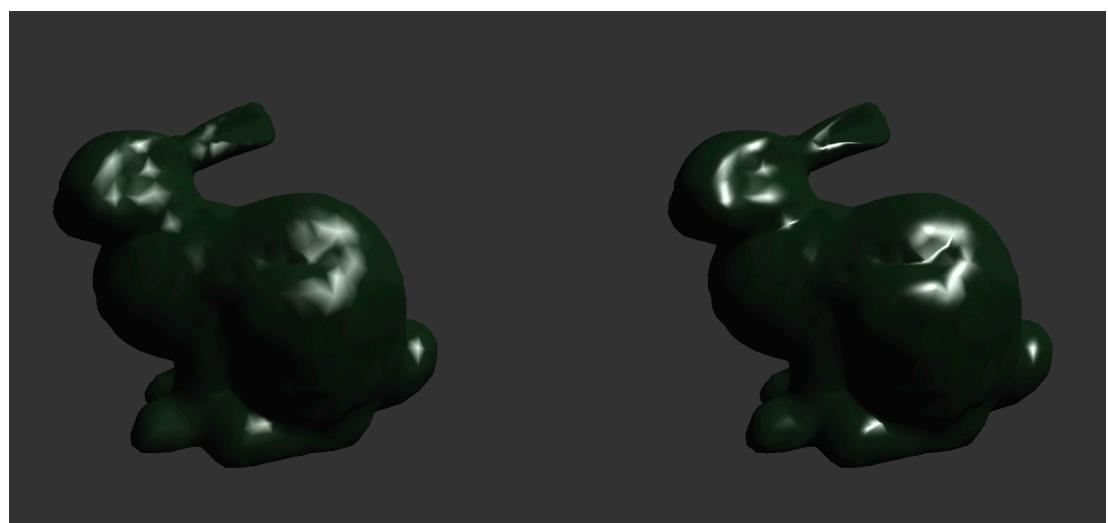
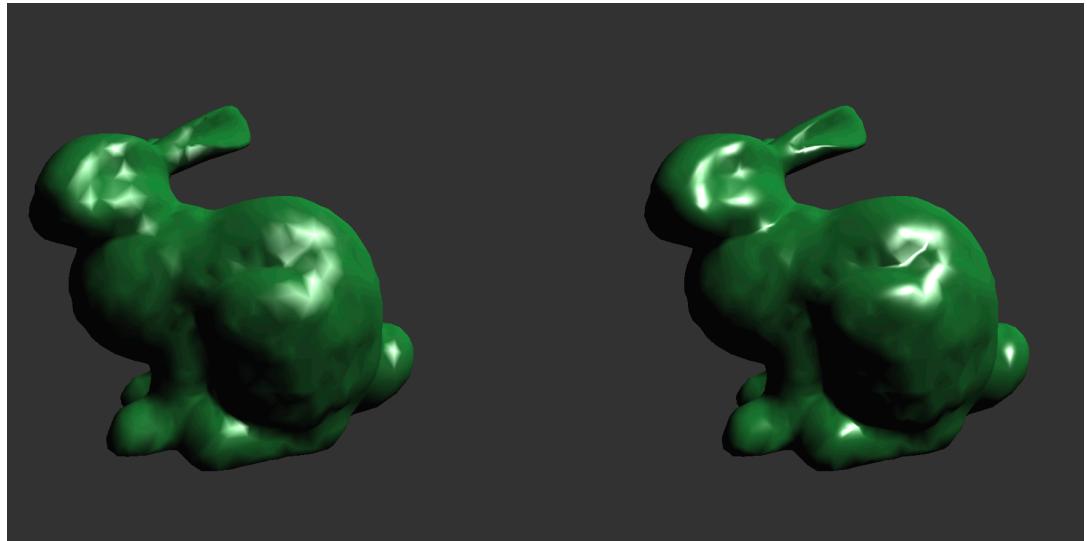
- 程式開始執行預設為Directional light，左邊為per_vertex的lighting，右邊為per_pixel的lighting。



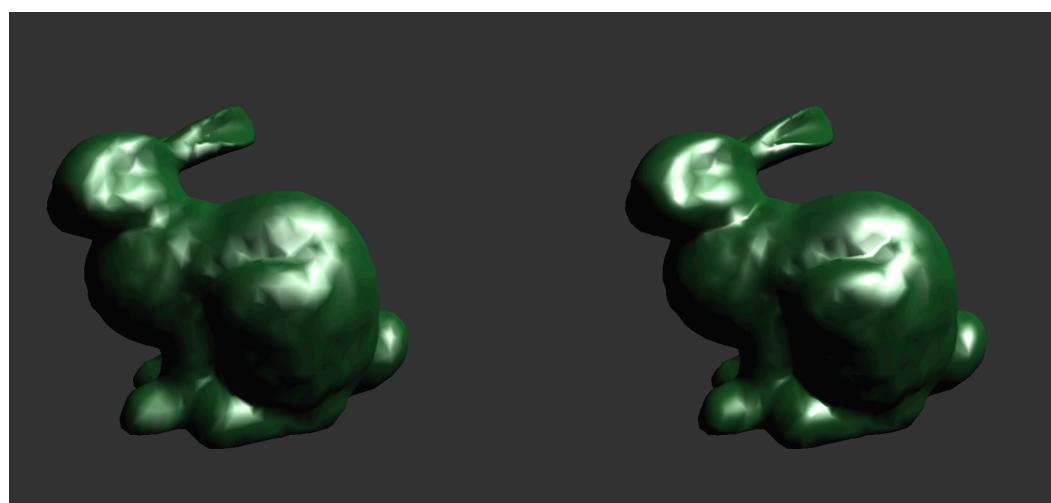
- 經過Translation、Scale、Rotation後分別為下面三張圖。



- 按 K 之後會轉到 light edit mode，滑鼠的x,y位置可以改變light的位置，滑鼠滾輪可以改變light的diffuse intensity，如下圖。

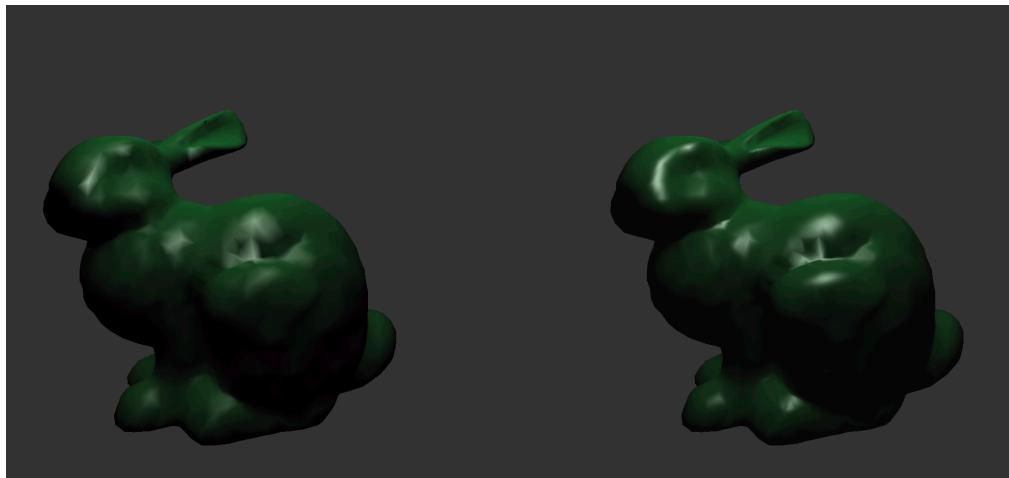


- 按J後可以利用滑鼠滾輪改變shininess，如下圖。

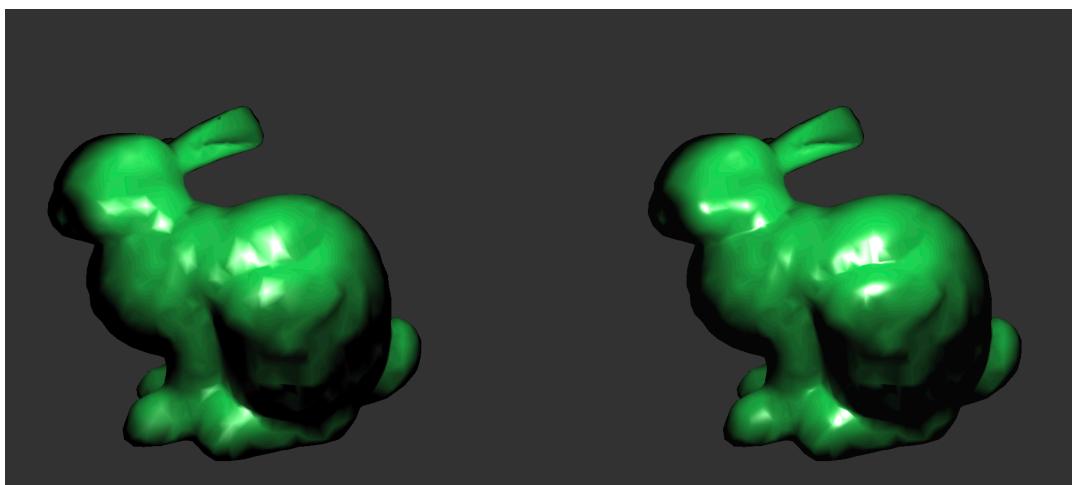
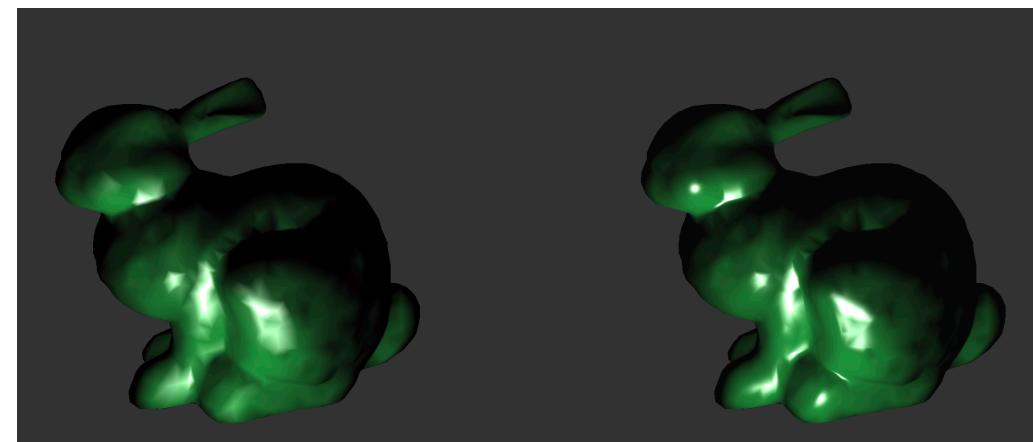


2. Point Light:

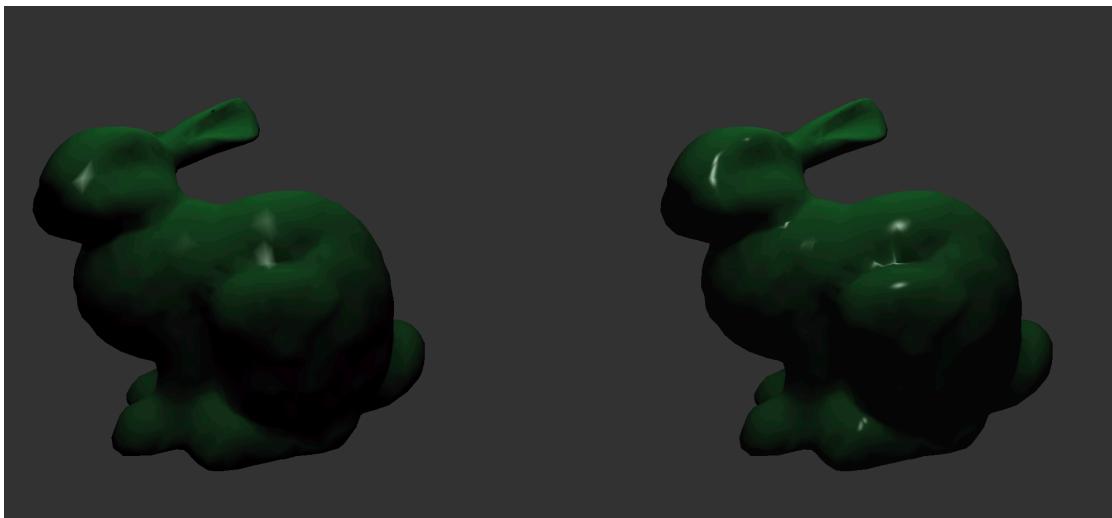
- 按 L 切換至Point light左邊為per_vertex的lighting，右邊為per_pixel的lighting。



- 按 K 之後會轉到light edit mode，滑鼠的x,y位置可以改變light的位置，滑鼠滾輪可以改變light的diffuse intensity，如下圖。

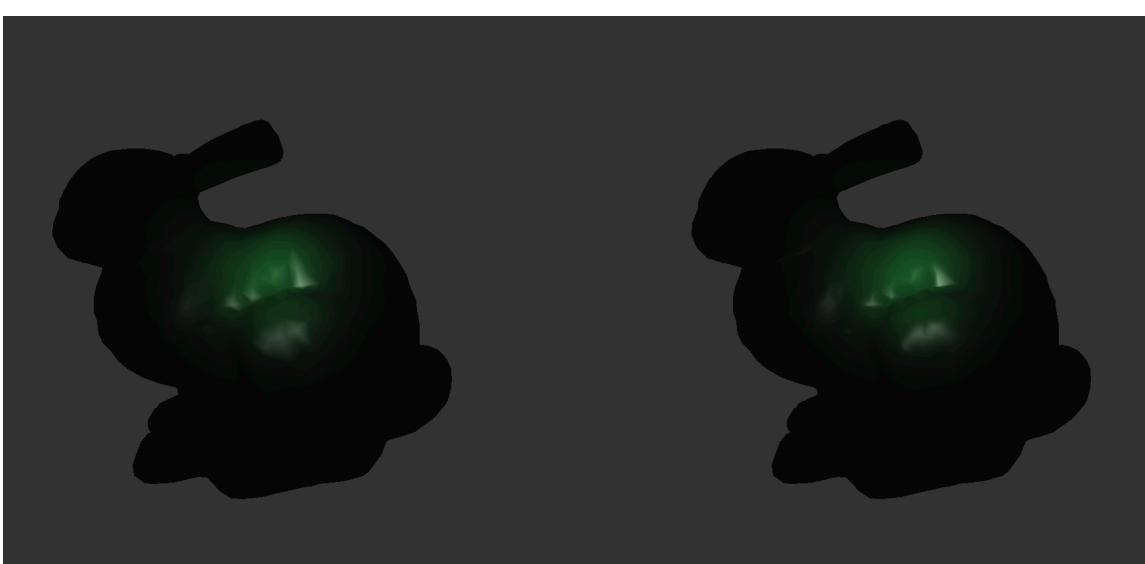


- 按 J 後可以利用滑鼠滾輪改變shininess，如下圖。

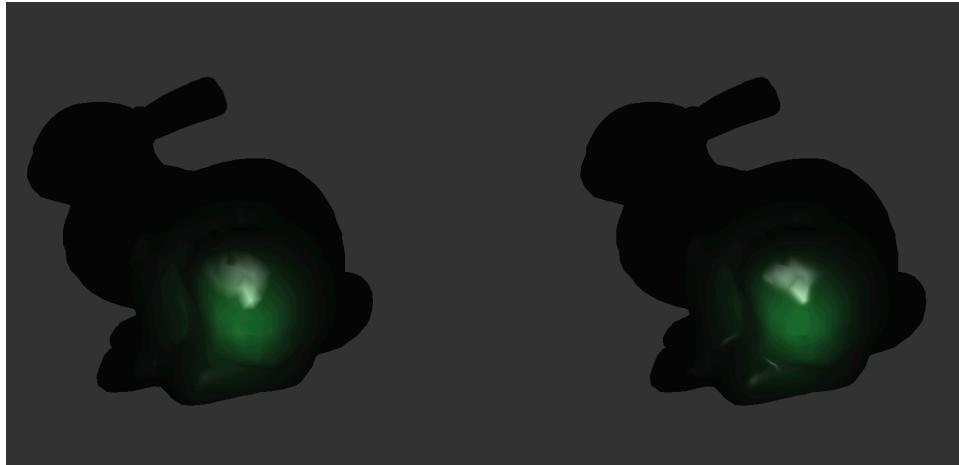


3. Spot Light:

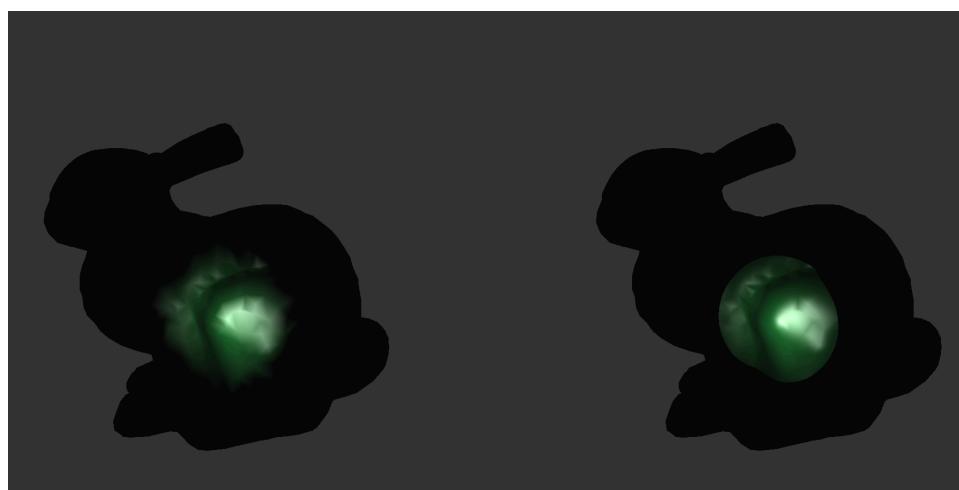
- 按 L 切換至Spot light左邊為per_vertex的lighting，右邊為per_pixel的lighting。



- 按 K 之後會轉到 light edit mode，滑鼠的x,y位置可以改變light的位置，滑鼠滾輪可以改變light的cutoff angle，如下圖。



- 按 J 後可以利用滑鼠滾輪改變shininess，如下圖。



以上是lighting的部分。

Console window是照老師要求的將目前的lighting source印出來。

```
-----  
Light source: Directional Light  
Light source: Positional Light  
Light source: Spot Light
```

這次作業的report就到這裡，謝謝老師及助教！