Additional material for **Generate 3d Plot and Surfaces**

1. An example script for generating a sphere in gnuplot.

```
#My first 3D plot

set parametric
set angle degree
set urange [0:360]
set vrange [0:180]
set isosamples 50,50
set ticslevel 0
r=1
splot r*sin(u)*cos(v), r*sin(u)*sin(v),r*cos(u)
```

2. An example script to solve the assignment is given below.

```
set parametric
# dummy variable is t for curves, u/v for surfaces
set angle degree
set urange [0:360]
set vrange [0:180]
set isosample 100,100
set ticslevel 0
set size 0.7,1.0
set key top left
set view equal xyz
unset xtics
unset ytics
unset ztics
set noborder
a=3
b= 0.3
c= 0.6
d=1
e=0.8

splot a*sin(u)*cos(v),a*sin(u)*sin(v),a*cos(u) lc rgb '#FFD700' title "Sun",\
     2.2+b*sin(u)*cos(v), 2.2+b*sin(u)*sin(v), 2.2+b*cos(u) lc rgb '#696969' title
"Mercury",\
     3+b*sin(u)*cos(v), 3+b*sin(u)*sin(v), 3+b*cos(u) lc rgb '#FFDEAD' title "Venus",\
     4.5+d*sin(u)*cos(v), 4.5+d*sin(u)*sin(v), 4.5+d*cos(u) lc rgb 'blue' title "Earth",\
     6+e*sin(u)*cos(v), 6+e*sin(u)*sin(v), 6+e*cos(u) lc rgb '#FF6347' title "Mars"
```