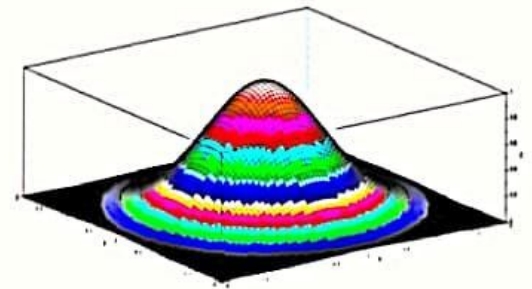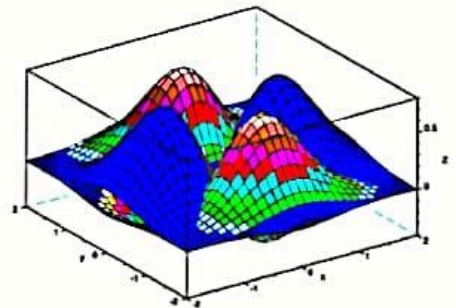# 3D plotting on graph

```
function Z=f(x,y)
Z=exp(-x.^2-y.^2);
endfunction
x=linspace(-2,2,81);
y=linspace(-2,2,81);
Z=feval(x,y,f)
plot3d(x,y,Z)  //blue graph//
```

```
function Z=f(x,y)
Z=exp(-x.^2-y.^2);
endfunction
x=linspace(-2,2,81);
y=linspace(-2,2,81);
Z=feval(x,y,f)
plot3d(x,y,Z)
surf(x,y,Z)
xlabel('x')
ylabel('y')
```



```
function Z=f(x,y)
Z=(2*x^2-y^2)*exp(-x.^2-y.^2);
endfunction
x=linspace(-2,2,30);
y=linspace(-2,2,30);
Z=feval(x,y,f)
plot3d(x,y,Z)
surf(x,y,Z)
xlabel('x')
ylabel('y')
```



```
x=linspace(-2,2,81);
y=linspace(-2,2,81);
[x,y]=meshgrid(x,y);
z=exp(-x.^2-y.^2);
plot3d(x,y,z)
xlabel('x')
ylabel('y')
```