1.

```
function [ gradehierarchy ] = grade( gradenumber )
%输入分数输出成绩等级
if(gradenumber>=90)
    gradehierarchy = 'A';
elseif(gradenumber>=80)
    gradehierarchy = 'B';
elseif(gradenumber>=70)
    gradehierarchy = 'C';
elseif(gradenumber>=60)
    gradehierarchy = 'D';
else
    gradehierarchy = 'E';
end


end
```

```
%测试脚本
grade1 = grade(95);
grade2 = grade(85);
grade3 = grade(70);
grade4 = grade(69);
grade5 = grade(10);
fprintf('your grade are:%s %s %s %s %s',grade1,grade2,grade3,grade4,grade5);
```

2.

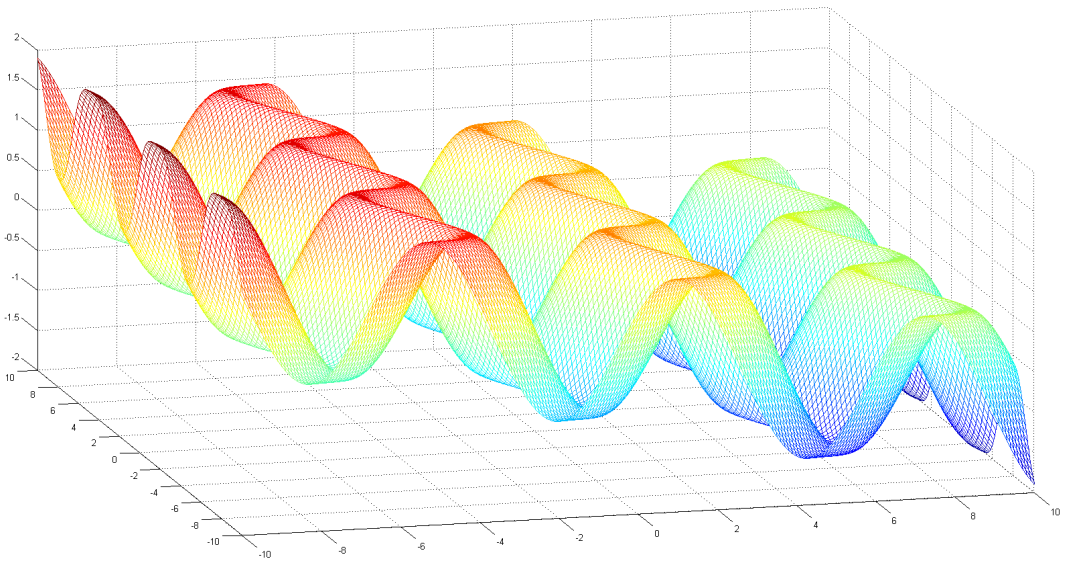
```
price = input('input price:');
if price<200
  price1 = price;
elseif price<500
  price1 = price*0.97;
elseif price<1000
  price1 = price*0.95;
elseif price<2500
  price1 = price*0.92;
elseif price<5000
  price1 = price*0.9;
else
  price1 = price*0.86;
end
fprintf('%8.2fdollars you have to pay',price1);
```

3.

```
s = 0;
ave = 0;
n = 0;
while(1)
    a = input('input some number ,end as zero:');
    if(a~=0)
        s = s + a;
        n = n+1;
    else
        break;
    end
end
ave = s/n;
fprintf('average is %f\nsum is %d\n',ave,s);
```

二、1.

```
x = -10:1/10:10;
y = -10:1/10:10;
[x,y] = meshgrid(x,y);
z = sin(x+sin(y))-x./10;
mesh(x,y,z);
```



2.

```
x=[0 1 1 0 0 0;1 1 0 0 1 1;1 1 0 0 1 1;0 1 1 0 0 0];
y=[0 0 1 0 0 0;0 1 1 1 0 0;0 1 1 1 1 1;0 0 1 0 1 1];
z=[0 0 0 0 0 1;0 0 0 0 0 1;1 1 1 1 0 1;1 1 1 1 0 1];
fill3(x,y,z, 'c');
```