question 2

```
n=input('enter the number of elements in set A :\n')
```

```
n =
2
```

```
R=input('enter the elements of the matrix of order n:')
```

```
R = 2×2
     1     0
     1     1
```

```
x=true;% or 1
for i=1:n
    if R(i,1)==0
        fprintf('Not reflexive')
        x=false;% or 0
        break
    else

        continue
    end
end
if(x==true) % or 1
    fprintf('reflexive')
end
```

```
reflexive
```

```

```

Functions

```
function r = recpowerm(b,n,m)
    if n == 0
        r = 1;
    elseif mod(n,2) == 0
        r = mod((recpowerm(b,n/2,m)^2),m);
    else
        r = mod(mod((recpowerm(b,(n-1)/2,m)^2),m)*mod(b,m),m);
    end
end

m = input("Enter M (m >= 2): ")
```

```
m =
6
```

```
n = input("Enter n: ")
```

```
n =
4
```

```
b = input("Enter b (1 <= b < m): ")
```

```
b =
3
```

```
if(b > m)
    fprintf("B must be between 1 and M !")
else
    fprintf("my recpowerm(%d,%d,%d) is %d",b,n,m,recpowerm(b,n,m))
    fprintf("matlab powermod(%d,%d,%d) is %d",b,n,m,powermod(b,n,m))
end
```

```
my recpowerm(3,4,6) is 3
matlab powermod(3,4,6) is 3
```