

We begin with some basic/generic commands to keep the screen and workspace un cluttered.

```
clc
clear
disp('Program to assign grades to Students')
```

INPUT

Next comes the code to take input in different variables. Input can be taken in two different arrays or one array with two columns. But before that we need to ask for the total no. of students. Please note the use of different types of brackets.

Input in separate arrays:

```
n = input('Total No. of Students : ');
for i = 1:n
    RN{i} = input('Enter Reg. No. : ');
    MK(i) = input('Enter Marks : ');
end
```

Input in one array:

```
n = input('Total No. of Students : ');
for i = 1:n
    g{i,1} = input('Enter Reg. No. : ');
    g{i,2} = input('Enter Marks : ');
end
```

Input in one array with customized prompt message:

```
n = input('Total No. of Students : ');
for i = 1:n
    g{i,1} = input(['Reg. No. of Student No.', num2str(i), ' = ']);
    g{i,2} = input(['Marks of Student with Reg. No.', num2str(g{i,1}), ' = ']);
end
```

CALCULATION OF GRADES

```
for i = 1:n
    if g{i,2} >= 90;
        g{i,3} = 'A+';
    elseif g{i,2} >= 85;
        g{i,3} = 'A';
    elseif g{i,2} >= 80;
        g{i,3} = 'B+';
    elseif g{i,2} >= 75;
        g{i,3} = 'B';
    elseif g{i,2} >= 60;
        g{i,3} = 'D+';
    elseif g{i,2} >= 50;
        g{i,3} = 'D';
    else
        g{i,3} = 'F';
    end
end
```

Complete Code Barebone Version:

```
clc
clear
%Input Commands
n = input('Total No. of Students : ');
for i = 1:n
    g{i,1} = input('Enter Reg.# :');
    g{i,2} = input('Enter Marks :');
end
%Calculations
for i = 1:n
    if g{i,2} >= 90;
        g{i,3} = 'A+';
    elseif g{i,2} >= 85;
        g{i,3} = 'A';
    elseif g{i,2} >= 80;
        g{i,3} = 'B+';
    elseif g{i,2} >= 75;
        g{i,3} = 'B';
    elseif g{i,2} >= 70;
        g{i,3} = 'C+';
    elseif g{i,2} >= 65;
        g{i,3} = 'C';
    elseif g{i,2} >= 60;
        g{i,3} = 'D+';
    elseif g{i,2} >= 50;
        g{i,3} = 'D';
    else
        g{i,3} = 'F';
    end
end
end
%OutPut
clc
disp(g)
```

Complete Code Shashka Version:

```
clc
clear
disp('Program to assign grades to Students')
%Class Information
info1=input('What is year/session of class : ','s');
info2= [info1,'-CIV-'];
n = input('Total No. of Students : ');
g = cell(n+1,3); %To store output
g(1,1)={'Registration No.'};
g(1,2)={'Marks Obtained'};
g(1,3)={'Grade Obtained'};
for i = 2:n+1
    clc
    g{i,1} = input(['Reg. No. of Student No.',num2str(i-1),' = ']);
    g{i,1} = [info2,num2str(g{i,1})];
    g{i,2} = input(['Marks of Student with Reg. No. ',num2str(g{i,1})],' = ');
    end
%Generation of Grades Corresponding to Marks
for i = 2:n+1
    if g{i,2} >= 90;
        g{i,3} = 'A+';
    elseif g{i,2} >= 85;
        g{i,3} = 'A';
    elseif g{i,2} >= 80;
        g{i,3} = 'B+';
    elseif g{i,2} >= 75;
        g{i,3} = 'B';
    elseif g{i,2} >= 70;
        g{i,3} = 'C+';
    elseif g{i,2} >= 65;
        g{i,3} = 'C';
    elseif g{i,2} >= 60;
        g{i,3} = 'D+';
    elseif g{i,2} >= 50;
        g{i,3} = 'D';
    else
        g{i,3} = 'F';
    end
end
end
%Out-Put
clc
disp('Grades of Students');
disp(g);
```