```
>> clear all
>> exercise1script

y =

   27.1411

>> x = 4

x =

     4

>> exercise1script

y =

   63.2432

>> x = 5

x =

     5

>> exercise1script

y =

  124.0411

>> x = 6

x =

     6

>> exercise1script

y =

  215.7206

>> x = 3

x =

     3

>> exercise1func(3)
```

```
ans =

   27.1411

>> x = [3 4 5 6]

x =

     3     4     5     6

>> exercise1func(x)

ans =

   27.1411   63.2432  124.0411  215.7206

>> x = 12

x =

    12

>> a = 12

a =

    12

>> b = 5

b =

     5

>> xArray = [1 3 5 7 9]

xArray =

     1     3     5     7     9

>> yArray = [2 4 6 8 10]

yArray =

     2     4     6     8    10

>> lec_16

y =

    12
```

```
y =

     2


ans =

    12

>> myRand(1,10)

ans =

    8.3325

>> myRand(100,100+1)

ans =

  100.9058

>> myRand(3,pi)

ans =

    3.0180

>> myRand(20)
Not enough input arguments.

Error in myRand (line 2)
scale = maxRand - minRand;

>> myRand(20) % THis will give error since maxRand is not stated
Not enough input arguments.

Error in myRand (line 2)
scale = maxRand - minRand;

>> myRand(20,1)

ans =

    2.6459

>> twoTo8 = twoN(8)

twoTo8 =
```

```
   256

>> newNumber = twoN(5)

newNumber =

    32

>> squareOfTwo = twoN(2)

squareOfTwo =

     4

>> twoN(9)

ans =

   512

>> rootOfPower = twoN(5)^(1/2)

rootOfPower =

    5.6569

>> twoN % This wont work since w=the value of n os not defined
Not enough input arguments.

Error in twoN (line 6)
y = 2^n;

>> quadRoots(1,3,2)

ans =

    -1
    -2

>> quadRoots(1,6,10)

ans =

  -3.0000 + 1.0000i
  -3.0000 - 1.0000i

>> quadRoots(1,6,13)

ans =

  -3.0000 + 2.0000i
```

```
  -3.0000 - 2.0000i

>> myCubic(-5)

ans =

   -58

>> myCubic(5)

ans =

   142

>> x = [-5:5]

x =

    -5    -4    -3    -2    -1     0     1     2     3     4     5

>>  cubicExercise

A =

  Line with properties:

            Color: [0 0.4470 0.7410]
        LineStyle: '-'
        LineWidth: 0.5000
           Marker: 'none'
       MarkerSize: 6
    MarkerFaceColor: 'none'
            XData: [1 2 3 4 5 6 7 8 9 10 11]
            YData: [-58 -20 -2 2 -2 -8 -10 -2 22 68 142]

  Show all properties


B =

  1×11 logical array

   0   0   0   0   0   0   1   0   0   0   0


ans =

    2.1249
   -2.7616
   -1.3633
```

```
ans =

   86.6667

>> exercise1script

y =

   27.1411

>> plot(x,y)
>> x = -24567

x =

      -24567

>> lec_16

y =

       24567

>> a = 12.345677897653345678765432345678

a =

   12.3457

>> format long
>> lec_16

ans =

    12

>> a = 12.945677897653345678765432345678

a =

  12.945677897653345

>> lec_16

ans =

    13

>> lec_16
>> a = 12
```

```
a =

    12

>> b = 14

b =

    14

>> demoFun
Error using nargin
Function demoFum does not exist.

Error in fplot (line 115)
        if isa(fn{k},'function_handle') && nargin(fn{k}) > 1

Error in demoFun (line 1)
fplot(@demoFum,[a b])

>> fplot(@demoFun,[a b])
Error using nargin
demoFun is a script.

Error in fplot (line 115)
        if isa(fn{k},'function_handle') && nargin(fn{k}) > 1

>> fplot(@demoFun,[a b])
Error using nargin
demoFun is a script.

Error in fplot (line 115)
        if isa(fn{k},'function_handle') && nargin(fn{k}) > 1

>> fplot(@demoFun,[12 20])
Error using nargin
demoFun is a script.

Error in fplot (line 115)
        if isa(fn{k},'function_handle') && nargin(fn{k}) > 1

>> demoFun
Execution of script demoFun as a function is not supported:
E:\College-Codes\Fourth Year\SEM VII\IT  WS\Practical Work\Practical 8\demoFun.m

Error in demoFun (line 1)
y = demoFun(x)

>> exercise1script
Error using rand
```

```
Size inputs must be integers.

Error in exercise1script (line 8)
y = rand(3, pi)

>> cubicExercise

A =

  Line with properties:

            Color: [0 0.447000000000000 0.741000000000000]
        LineStyle: '-'
        LineWidth: 0.500000000000000
           Marker: 'none'
       MarkerSize: 6
  MarkerFaceColor: 'none'
            XData: 1
            YData: -1.482589829445800e+13

  Show all properties


B =

  logical

   0


ans =

   2.124885419764572
  -2.761557181831891
  -1.363328237932683


ans =

  86.666666666666714

>> x = [0 5]

x =

     0     5

>> x = [0:5]

x =
```

```
     0     1     2     3     4     5

>> cubicExercise

A =

  Line with properties:

              Color: [0 0.447000000000000 0.741000000000000]
          LineStyle: '-'
          LineWidth: 0.500000000000000
             Marker: 'none'
         MarkerSize: 6
    MarkerFaceColor: 'none'
              XData: [1 2 3 4 5 6]
              YData: [-8 -10 -2 22 68 142]

  Show all properties


B =

  1×6 logical array

   0   1   0   0   0   0


ans =

   2.124885419764572
  -2.761557181831891
  -1.363328237932683


ans =

  86.666666666666714

>> myCubic
Not enough input arguments.

Error in myCubic (line 7)
y = x.^3 + 2*x.^2 - 5*x - 8;

>> x = 5

x =

     5

>> myCubic
```

```
Not enough input arguments.

Error in myCubic (line 7)
y = x.^3 + 2*x.^2 - 5*x - 8;

>> myCubic(-5)

ans =

   -58

>> cubicExercise
File: cubicExercise.m Line: 9 Column: 15
Invalid expression. When calling a function or indexing a variable, use parentheses.↙
Otherwise, check for mismatched
delimiters.

>> cubicExercise
File: cubicExercise.m Line: 9 Column: 15
Invalid expression. When calling a function or indexing a variable, use parentheses.↙
Otherwise, check for mismatched
delimiters.

>> cubicExercise
Unrecognized function or variable 'mycubic'.

Error in cubicExercise (line 8)
         mycubic(x)

>> cubicExercise

ans =

    -8   -10    -2    22    68   142


ans =

  0×1 empty double column vector

>> cubicExercise

ans =

    -8   -10    -2    22    68   142


ans =

  0×1 empty double column vector
```

```
>> cubicExercise

ans =

  0×1 empty double column vector

>> cubicExercise

ans =

  1.623881610174853 + 0.000000000000000i
 -0.553160630884582 + 1.629529753677630i
 -0.553160630884582 - 1.629529753677630i
 -1.767560348405686 + 0.000000000000000i

>> cubicExercise
Error using roots
Too many output arguments.

Error in cubicExercise (line 9)
         [a b c d] = roots(y)

>> cubicExercise

ans =

   2.124885419764572
  -2.761557181831891
  -1.363328237932683

>>
```