Matlab Practical File

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Practical 1.
Largest among three numbers

```
a = input(“Enter the first number:”);
b = input(“Enter the first number:”);
c = input(“Enter the first number:”);

if (a > b)
      if (a > c)
            fprintf(“%d is the largest number.”,a)
      else
            fprintf(“%d is the largest number.”,c)
      end
else
      if (b > c)
            fprintf(“%d is the largest number.”,b)
      else
            fprintf(“%d is the largest number.”,c)
      end
end
```

Practical 2.
Number is positive or negative

```
x = input(“Enter the number:”);

if (x < 0)
      disp(“The number is negative”)
else
      disp(“The number is positive”)
end
```

Practical 3.
If number is odd or even

```
x = input(“Enter the number:”);

if (x % 2 == 0)
      disp(“The number is even”)
else
      disp(“The number is odd”)
end
```

Practical 4.
Factorial of a number

```
x = input(“Enter the number you want to find the factorial of:”);

fact = 1;
for i in 1..x
     fact = fact * i;
end

disp(fact)
```

Practical 5.
Print the multiplication table of a number

```
x = input(“Enter the number you want a table of:”);

for i in 1..10
     fprintf(“%d x %d = %d”,x,i,x*i)
end
```

Practical 6.
Display matrices in a single row

```
x = [1 2 3; 4 5 6; 7 8 9];

disp(x(:))
```

Practical 7.
Print fibonacci series

```
f = 0;
s = 1;

for i in 1:100
     disp(f);
     s = s + f;
     f = s - f;
end
```

Practical 8.
Show how to use linspace

```
start = input(“Enter the starting value:”);
stop = input(“Enter the ending value:”);
step = input(“Enter the value of the step:”);

x = linspace(start, stop, step);

disp(x)
```

Practical 9.
Plot the graph of *sin(x)* using MatLab

```
x = linspace(0, 2*3.1416);
y = sin(x);

plot(x,y)
```

Practical 10.
Plot the graph of a line.

```
x = linspace(0, 2*3.1416);
m = input(“Enter the slope of the line:”);
c = input(“Enter the y-intercept of the line:”);
y = m * x + c;

plot(x,y);
xlabel(“x”);
ylabel(“y”);
```