# Parag Mandal - ENG20CS0246 / DAY 1

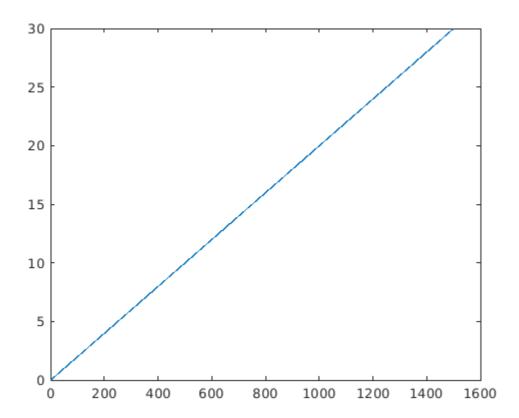
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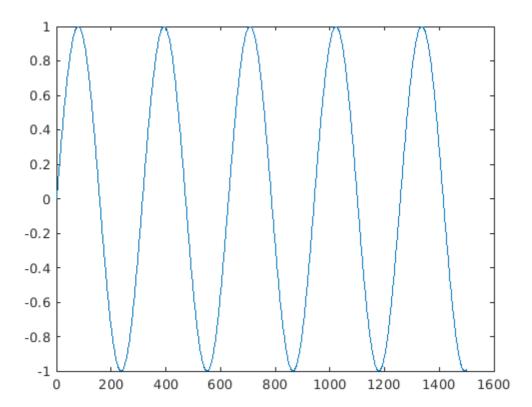
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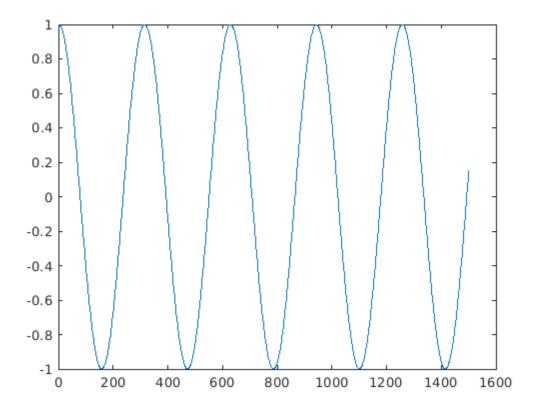
# **Basic MATLAB Tutorial**

# Р1

```
clc;clear all;close all;
t=0:0.02:30;
plot(t)
figure
a=sin(t);plot(a)
figure
b=cos(t);plot(b)
```

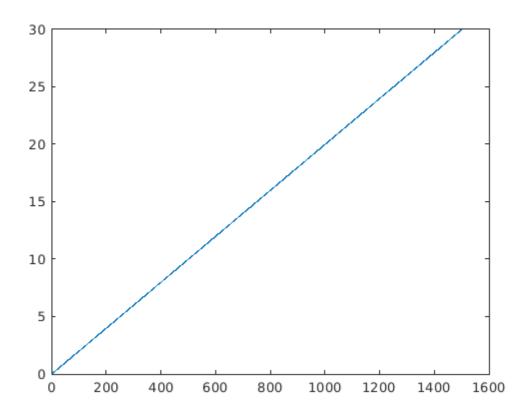


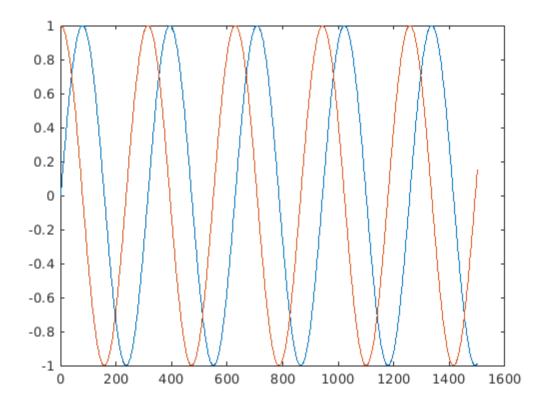




# **P2**

```
clc;clear all;close all;
t=0:0.02:30;
plot(t)
figure
a=sin(t);plot(a)
hold on
b=cos(t);plot(b)
```





# Р3

```
clc;clear all;close all;
a=100;
b=200;
c=a+b
d=a-b
```

```
e=a*b
f=a/b
g=a\b
h=a^b
h=a^b
% P4
clc;clear all;close all;

a=100;
b=200;
v=3.4;
format short;
c=a*b^v
```

```
c =
   300
d =
 -100
e =
       20000
f =
   0.5000
g =
     2
h =
  Inf
c =
   6.6604e+09
```

### P5

```
clc;clear all;close all;

l = input("Enter the length: ");
w = input("Enter the width: ");
h = input("Enter the height: ");
vol=l*w*h;

fprintf("\nThe Volume is: %d\n", vol)
```

```
Error using input
Cannot call INPUT from EVALC.

Error in DAY1 (line 48)
l = input("Enter the length: ");
```

#### **P6**

```
clc;clear all;close all;
A = [1 2 3; 4 5 6; 7 8 9]
A(:,:,2) = [10 11 12; 13 14 15; 16 17 18]
B = cat(3,A,[3 2 1; 0 9 8; 5 3 7])
B(:,:,4) = 0
```

# SpringDamp\_c.m

```
Kd=0.01;
Ks=0.02;
m=65;
```

# EMF\_a.m

```
R=1;
L=0.2;
Il=0.005;
Kb=0.22;
Kt=0.2;
```

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