

```
%First FreeMat Programming Assignment
%Jacob Rust
%October 16, 2018
```

```
clc;
clear all;
close all;
```

```
%Task 1
```

```
x = 3.5;
y = -1.8;
z = pi/3;
```

```
(x^2 + y^3)*(sin(z))
```

```
%Task2
```

```
for(i = 1:10)
    randi(1,6)
end
```

```
%Task 3
```

```
A = [1,3,1;0,5,0;-1,3,-1];
```

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

```
A*B
```

```
B*A
```

```
A+B
```

```
A-B
```

```
2*A+3*B
```

```
%Task 4 Not done
```

```
d = 2;
s = 1;
n = 99;
```

```
for(i = 1:1:n)
```

```
    s = s + i;
    d = d + s;
```

```
end
```

```
d
```

```
%Task 5
```

```
a = (3*pi)/4;
```

```
sin(cos(a))
```

```
%Task 6
```

```
n = 12;
```

```
factorial = 1;
```

```
for(i = 1:1:n)
```

```
    factorial = factorial*i;
```

```
end
```

```
factorial
```

```
%Task 7
```

```
x = (-pi*4: 0.1: pi*4);
```

```
y= 3 * sin(x);
```

```
plot(x,3y,'r');
```

```
title('Sine');
```