

```
clc
```

```
F= @(x) [  
    x(1)^3 + x(2)^3 - x(3)^3 - 129;  
    x(1)^2 + x(2)^2 - x(3)^2 - 9.75;  
    x(1) + x(2) - x(3) - 9.49;  
    ];
```

```
J= @(x) [  
    3*x(1)^2, 3*x(2)^2, -3*x(3)^2;  
    2*x(1), 2*x(2), -2*x(3);  
    1, 1, -1;  
    ];
```

```
x = [4; 2; -3];
```

```
error = 1e3;
```

```
tol = 1e-5;
```

```
n = 0;
```

```
while error > tol  
    dx = -J(x)\F(x);  
    error = norm(dx)/norm(x);  
    x = x + dx;  
    n = n+1;
```

```
end
```

```
fprintf("Iteraciones : %d \n",n);
```

```
fprintf("Respuesta : %f \n", x.');
```

```
% F([4.357338, 1.666565, -3.466097])
```