

%Finally it should be linspace T and plot T vs f(t) and a(m+1) vector is the y vector.

```
T = linspace (0,10,100);
```

```
x=1;
```

```
num =1;
```

```
den =1;
```

```
for i=1:length(T)
```

```
    f(i) = 0;
```

```
for m=0:9
```

```
    for k=0:9
```

```
        if (m~=k)
```

```
            b(k+1) = (t(m+1)-t(k+1));
```

```
            x(k+1) = T(i) - t(k+1);
```

```
        else b(k+1)=1;
```

```
            x(k+1)=1;
```

```
        end
```

```
    end
```

```
    den = cumprod(b);
```

```
    num = cumprod(x);
```

```
    p(m+1) = num(10)/den(10);
```

```
end
```

```
for m=0:9
```

```
    f(i) = f(i) + a(m+1)*p(m+1);
```

```
end
```

```
end
```

```
plot(T,f);
```

```
xlabel('t--->');
```

```
ylabel('y--->');
```

```
hold on
```

```
plot(t,y,'*');
```

```
hold off
```