

```
function ft = bsplines(t,y)
    d = zeros(10,10);

    for i=1:length(t)
        d(i,1) = funcb2(t(i));
        d(i,2) = funcb2(t(i)-1);
        d(i,3) = funcb2(t(i)-2);
        d(i,4) = funcb2(t(i)-3);
        d(i,5) = funcb2(t(i)-4);
        d(i,6) = funcb2(t(i)-5);
        d(i,7) = funcb2(t(i)-6);
        d(i,8) = funcb2(t(i)-7);
        d(i,9) = funcb2(t(i)-8);
        d(i,10) = funcb2(t(i)-9);

        D = d^(-1);
        % Inverse of the A matrix.
        a = D*y;
        % calculating the alpha vector.

    end

    T = linspace (0,10,10000);

    for j=1:length(T)

        ft(j) = [a(1)*funcb2(T(j)) + a(2)*funcb2(T(j)-1) + a(3)*funcb2(T(j)-2) + a(4) ✓
        *funcb2(T(j)-3) + a(5)*funcb2(T(j)-4) + a(6)*funcb2(T(j)-5) + a(7)*funcb2(T(j)-6) + a ✓
        (8)*funcb2(T(j)-7) + a(9)*funcb2(T(j)-8) + a(10)*funcb2(T(j)-9)];

    end

    plot(T,ft);
    xlabel('t--->');
    ylabel('y--->');
    hold on
    plot(t,y, '*');

end
```