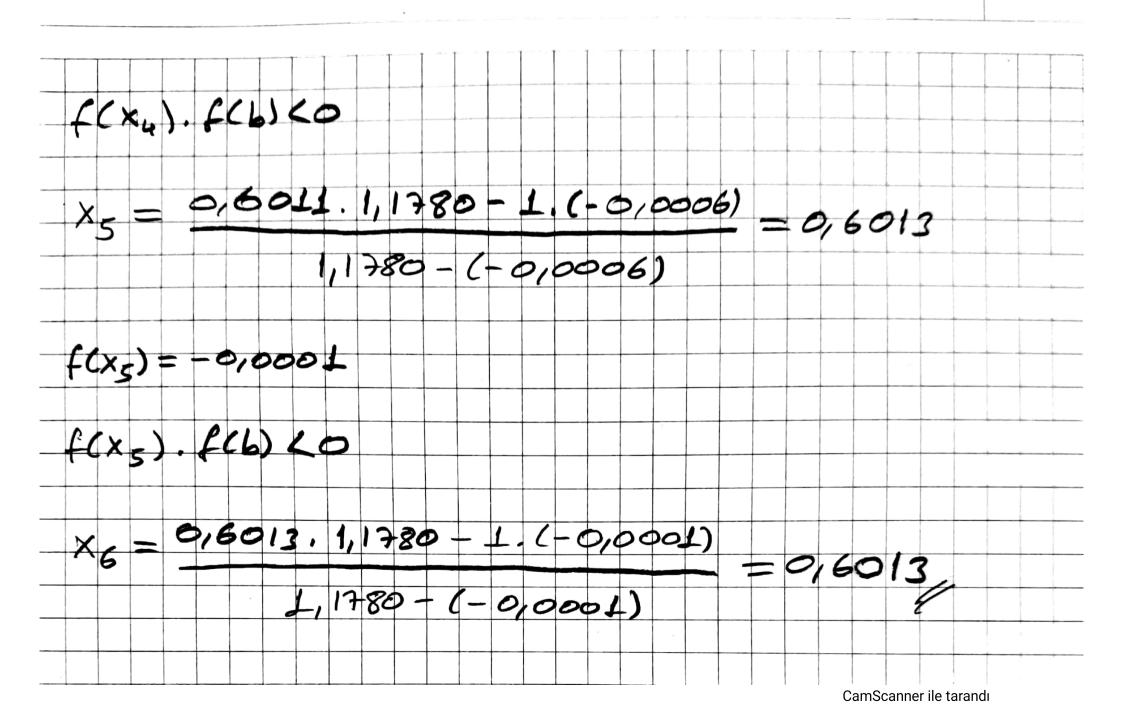
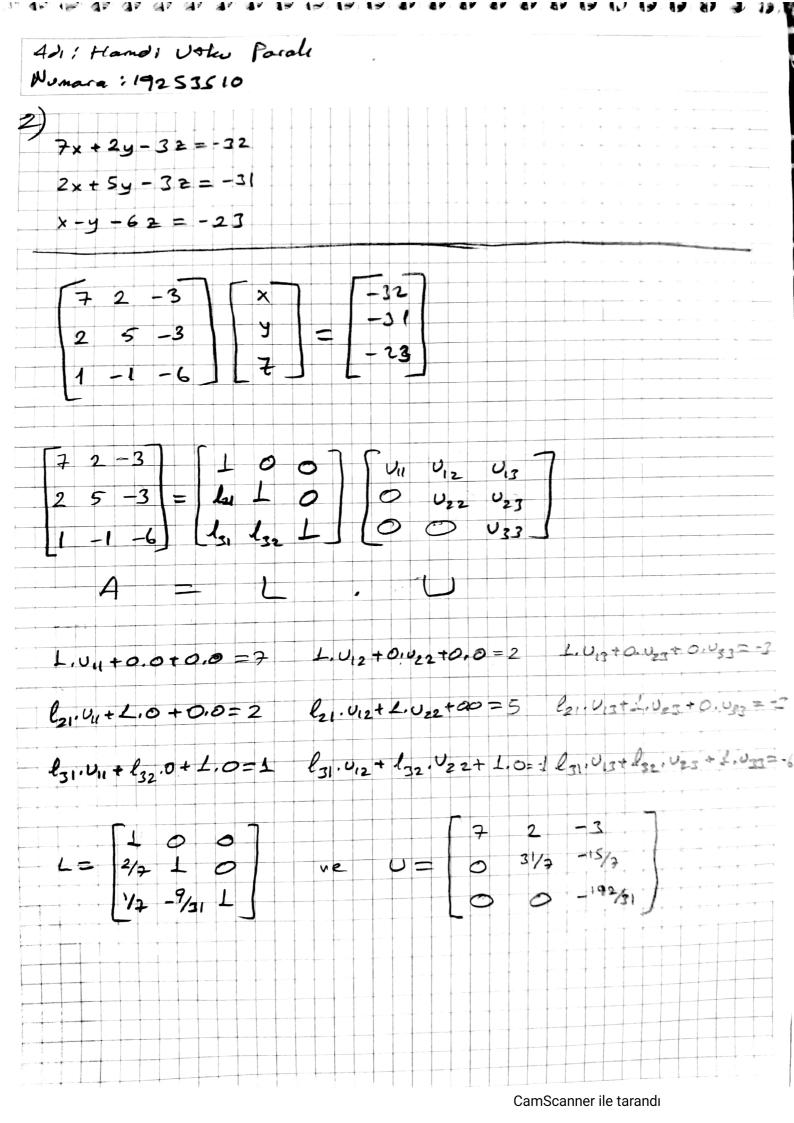
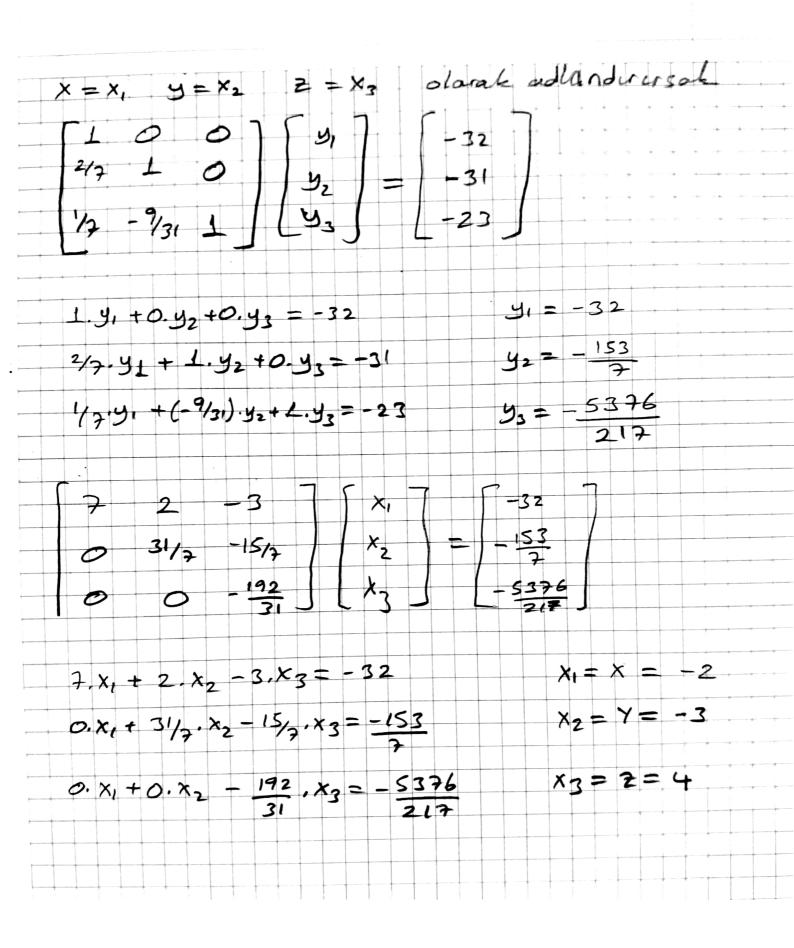
Adi ve Sayadi : Hamdi Utku Parali Numara: 19253510 1) a=0 ve b=1 almursa f(a)=e°-cos0-1=-1  $f(b) = e^{t} - cos 1 - 1 = 1,1780$ f(a). f(b) <0  $x_0 = a. f(b) - b. f(a) = 0.1,1980 - 1.(-1) = 1.0,4591$  f(b) - f(a) = 1,1780 - (-1) = 2,1380f(x0) = -0,3138 f(x0). f(b) <0 oldugundon dolays x1 = 0,4591.1,1780 - 1.(-0,3138) = 0,5729 f(x1) = -0,0669 f(x1). f(b) < 0 old.gundan dolays  $X_2 = 0.5729 \cdot 1.1780 - 1.6 - 0.0669) = 0.5959$ f(x2) = -0,0130 f(x2). f(b) <0  $x_3 = 0.5959.1,1780 - 1.(-0.0130)$  1,1780 - (-0.0130) = 0.6003 $f(x_3) = -0,0025$   $f(x_3), f(b) < 0$  $\times u = 0,6003.1,1780 - 1,(-0,0025) = 0,6011$ f(x4) = -0,0006







Adire Soyadi: Hamdi Utku Parali Numara: 19253510  $f(x) = x - \int x^2 - 1$  forkslyonunun muttake hatosi Af(Xo) = If'(Xo) . AXo  $\triangle f(x_0) \stackrel{\sim}{=} \left| \frac{2x_0}{2x_0^2 - 1} \right|$ Bagil Hadası E, (f(x)) =  $\mathcal{E}_{r}(f(x_{0})) = \left[1 - \frac{2 \times 6}{2 \cdot 1 \times 6^{2-1}}\right] \cdot \Delta \times_{o}$ 

Adı ve Soyadı: Handi Utler Paralı Numara: 19253510 4) -(x; +1, y; +1) = f(x;,y;) + (x;+1-x;) = f(x;,y;) + (y;+1-y;) = f(x;,y;)  $-f(x_i,y_i) = (x_i+1-x_i)\frac{\partial f}{\partial x_i}(x_i,y_i) + (y_i+1-y_i)\frac{\partial f}{\partial x_i}(x_i,y_i)$ g(x,y) isin vygulanusa - g(xi, yi) = (xi + 1 - xi) = (xi, yi) + (yi + 1 - yi) = (xi, yi) xo=0,4 yo=-0,75 iam Isleme boxlayolim f(x0,y0) = -0,853 = 2.cos (2x-y) -1,2=0,8 9(x0,40) = -0,028 24 (x, 40) = -1 cos (2x-3) = -1 3x ((x, y,)) = 1,6 - x = 0,64 3y (xo,yo) = 3y = -2,25 1. ve 2. denklande yesine kayorsale + 0,853 = (x,-x.).0,8 + (y,-y.).(-1) +0,028 = (x1-x0),0,64 + (y1-y0), (-2,25)  $-0.8/1,923 = 0.8 \times 1 - 1 \cdot 1.9$   $-1.972 = 0.64 \times 1 - 2.25 \cdot 1.9$   $-1.5384 = -0.64 \times 1 + 0.89$ +1,972 = 0,64 x, -2,25 y, 9,=-0,299 0,4336 = -1,45  $x_1 = 2,118$