ofection - A Stemester - 6 University, Roll No-1121004 Studget - Computer Graphics [186-602] Question: - Write an algorithm and program to implement DDA LINE DRAWING ALGORITM. Sol -- ALGORITHM: - Starting Coordinates = (xo, yo) & Griven 3 · Ending coordinates = (xn, yn) The points generation wing DPA Algorithm involves the following steps estep-01 - Calculate Ax, By and M from the given input. We know that the Slope of a straight line M is given as These parameters are calculated as - ∆x = Xn - X₀ · ΔY = Yn-Yo $M = \Delta Y / \Delta x = X M = \frac{Y_n - Y_0}{X_n - X_0}$ Step-02 - Find the number of steps or points in bedween the standing and ending coordinates. if cobsolute CDX) > absolute CDY 1) osteps = absolute COXI; فللع क् अध्व = a केंड ० (100 Cay) Step-03 - Suppose the current point is CXP, Yp) and the next point is Cxp+1,4p+1) Find the next by following the below those cases: xp+1 = sound off (1+xp) Abti & some oft (W+xb) xpt1 = bound off (1+ xp) YP+1= bound off (1+ Yp) Xp+1 = bound off c 1/m+xp) Yp+1= round off cityp)

Roll No - 04

Name - Abhisher Verme

oftep-04 - keep repeating step-03 until the ent point is reached or the number of generated new points (including the standing and ending points) equals to the steps count.

Abhistek
Veume
Scanned by CamScanner

```
Name - Abhishek Verma
                              Roll No - oy
                   Section - A
Course - BCA
                                          Semuster - A
University Poll No - 1121004
                               July ect - Computer Graphics CPBC-602]
COPE:-
    # include < 6+dio.h>
    # include < geophics.h>
     in & main ()
    Ş
            ind you (Float num)
             ٤
                      reduct your <07 num - 0.5: Yum + 0.5;
              int XI = 100, X = 250, yl = 100, y2 = 250, step;
              int gd = DETECT, gm;
             floor x, y, m;
              INA 9x = X5-X1;
              int dy = 42- 41;
              m=dy/dix;
              if carx and)
                     Step = dx >
              else
                     step =dy;
               intid graph ( legd, fgm, " ");
               0089684 x A C X 1, A [ , " 4 " ) ;
               OURGENTRY CX2, 42, "B 4);
               pospinel (xI, yI, RED);
               x = x1, y=y1;
               While C &tep >0)
               ş
                        if cmcl)
                            x=X+l;
                             8=8+m;
                         if cm>=1
                              x= x+1/m;
                              y=y+1;
                         pubpinel Crucx), roy-(y), RED);
                         step -- ;
                gestch ();
                return 0;
       3
```

```
member 'rou' in something not a structure

ments to function 'putpixel'

2:6: note: declared here
t color);

c -lgraph -o dda

hite processing queue
ti-threaded client and KinitThreads has no

til for_event: Assertion '!xcb_xlib_threads
```