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1/2/009
sec A

DATE
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```
# include <stdio.h>
# include <graphics.h>
int main()
{
  int rou(float num)
  {
   return num<0? num-0.5 : num+0.5;
  }
 int x1=100, x2=250, y1=100, y2=250, step;
 int gd=DETECT, gm;
float x,y,m;
  int dx=x2-x1;
  int dy=y2-y1;
    m=dy/dx;
    if(dx>dy)
        Step=dx;
  else
     Step=dy;
   initgraph(&gd, &gm, "");
    outtextxy(x1,y1,"A");
   Outtext xy(x2,y2,"B");
    putpixel(x1,y1,RED);
      x=x1, y=y1;
      while(Step>0)
       {
          if(m<1)
          {
               x=x+1;
               y=y+m;
          }
```

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if(m>=1)
{
  x=x+1/m;
  y=y+1;
}
putpixel(rou(x), rou(y), RED);
     Step--;
}
   getch();
   return0;
  }
```

Algorithm

```
Step1: Start Algorithm
Step2: Declare x1, y1, x2, y2, dx, dy, x, y, as int variable
Step3: Enter value of x1, y1, x2, y2;
Step4: Calculate dx = x2 - x1
Step5: Calculate     dy = y2 - y1
Step6: If ABS (dx) > ABS(dy)
          Then step = abs(dx)
          else
Step7:  X -dx/step
        Y = dy/step
        assign x = x1
        assign y = y1
Step8: Step pixel(x,y)
Step9:  X = x + xinc
        y = y+ yin
          set pixel (Round(x), Round(y))
```

```
Step10: Repeat step 9 until $x=x_2$
Step11: End Algorithm.
```