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Roll No : 6

```c
#include<stdio.h>
#include<conio.h>
#include<graphics.h>
#include<math.h>
float round(float a);
void main()
{
 int gd=DETECT,gm;
 int x1,y1,x2,y2,dx,dy,N,x,m,y,k;
 printf("Enter x1,y1");
 scanf("%d%d",&x1,&y1);
 printf("Enter x2,y2");
 scanf("%d%d",&x2,&y2);
 initgraph(&gd,&gm,"c:\\turboc3\\BGI");
 dx=x2-x1;
 dy=y2-y1;
if(abs(dx)>abs(dy))
  N=abs(dx);
 else
 N=abs(dy);
```

```
x=x1;

y=y1;

putpixel(round(x),round(y),WHITE);

m=dy/dx;

for(k=1;k<=N;k++)

 {

   if(m<1)

       {

           x=x+1;

           y=m;

       }

   else if(m>1)

           {

                   x=1/m;

                   y=y+1;

           }

   else

   {

       x=x+1;

       y=y+1;

   }

 delay(100);

 putpixel(round(x),round(y),WHITE);

 }
```

```
outtextxy(200,20,"DDA");

outtextxy(x1+5,y1-5,"(x1,y1)");

outtextxy(x2+5,y2+5,"(x2,y2)");

getch();

closegraph();

}
float round(float a)

{

int b=a+0.5;

return b;

}
```

DDA