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Ans 1⇒ DDA Algorithm⇒

Step1⇒ Start

Step2⇒ Declare x_1, y_1, x_2, y_2.

Step3⇒ Enter value x_1, y_1, x_2, y_2

Step4⇒ Calculate $dx = x_2 - x_1$

Step5⇒ Calculate $dy = y_2 - y_1$

Step6⇒ If ABS (dx) > ABS (dy)

then step = abs(dx)

Else

step 7⇒ xinc = dx/step

yinc = dy/step

assign x => x_1

assign y = y_1

step8⇒ set pixel (x,y)

step9⇒ x = x + xinc

y = y + yinc

set pixel (Round (x), Round (y))

Step 10: Repeat step 9 until x=x2

Step 11: Stop

Programm ⇒

```
#include<graphics.h>
#include<conio.h>
#include<stdio.h>
void main()
{
int gd = DETECT, gm, i;
float x, y, dx, dy, steps;
int x0, x1, y0, y1;
initgraph(&gd, &gm, );
st. setbkcolor (WHITE);
x0=100, y0=200, x1=500, y1=300;
dx = (float)(x1-x0);
dy = (float)(y1-y0);
if (dx>=dy)
{
steps=dx;
}
else
{
steps=dy; }
```

```
dx = dx/steps;
dy = dy/steps;
x = x0;
y = y0;
~~i=0~~ i=1;
while (~~i<0s~~ (i<= steps)
{
putpixel(x,y, RED);
x += dx;
y += dy;
i = i+1
}
getch();
closegraph();
}
```