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~~Class~~

Sec → C

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Sub → Computer Graphics

Q → 1 → Ans →

```
# 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 = 300, y1 = 100, y2 = 200;
```

```
int gd = DETECT, gm;
```

```
float pk, pkk, x, y, step;
```

```
int dx = x2 - x1;
```

```
int dy = y2 - y1;
```

```
pk = 2 * dx - dy;
```

```
if (dx > dy)
```

```
step = dx;
```

```
else
```

```
step = dy;
```

```

initgraph (&gd, &gm, " ");
outtextxy (x1, y1, "A");
outtextxy (x2, y2, "B");
putpixel (x1, y1, white);

x = x1, y = y1;
while (step > 0)
{
    if (pk < 0)
    {
        pk = pk + 2 * dy;
    }
    else
    {
        pk = pk + 2 * dy - 2 * dx;
        y++;
    }
    putpixel (rou(x), rou(y), white);
    x++;
    step--;
}
getch();
return 0;
}

```