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**Batch: T5**

## Experiment 4: Implementation on circle algorithms

**CODE:**

```
#include<iostream>

#include<conio.h>

#include<graphics.h>

void drawCircle(int x, int y, int cx, int
cy);

int main()

{

int gd = DETECT, gm;

int r=150, cx=200, cy=200, pk, x, y;

initgraph(&gd, &gm,
"c:\\turboc3\\bgi");

pk = 1 - r;

x = 0;

y = r;
```

```
while(x < y)
{
drawCircle(x,y,cx,cy);
++x;
if(pk < 0)
{
pk = pk + (2*x) + 1;
}
else
{
--y;
pk = pk + (2*x) + 1 - (2*y);
}
}
getch();
closegraph();
return 0;
}
```

```
void drawCircle(int x, int y, int cx, int
cy)
{
putpixel(x+cx,y+cy,LIGHTGREEN);
putpixel(-x+cx,y+cy,LIGHTGREEN);
putpixel(x+cx, -
y+cy,LIGHTGREEN);
putpixel(-x+cx, -y+cy,
LIGHTGREEN);
putpixel(y+cx, x+cy,
LIGHTGREEN);
putpixel(y+cx, -x+cy,
LIGHTGREEN);
putpixel(-y+cx, x+cy,
LIGHTGREEN);
putpixel(-y+cx, -x+cy,
LIGHTGREEN);
}
```

**OUTPUT:**