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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:**

****