experiment 2  
(advance)

COMPUTER GRAPICS AND MULTIMEDIA

# Aim

Write a program to rotate a circle (alternatively inside and outside) around the circumference of another circle (animation).

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# **EXPERIMENT - 2**

**AIM:**

Write a program to rotate a circle (alternatively inside and outside) around the circumference of another circle (animation).

# **THEORY:**

circle(x, y, radius);

where,

(x, y) is center of the circle.

'radius' is the Radius of the circle.

# **SOURCE CODE:**

#include <graphics.h>

#include <iostream>

#include <math.h>

using namespace std;

void CircumRotation(int x, int y) {

for (int angle = 0; angle < 360; angle++) {

int nx = x + cos(angle/3.5)\*100;

int ny = y + sin(angle/3.5)\*100;

setcolor(WHITE);

circle(nx, ny, 10);

delay(500);

setcolor(BLACK);

circle(nx, ny, 10);

}

}

void rotation(int x, int y, int radius) {

int nx = x + 120;

int ny = y;

for (int angle = 0; angle < 360; angle++) {

setcolor(RED);

int nx = x + cos(angle/3.5)\*100;

int ny = y + sin(angle/3.5)\*100;

circle(nx, ny, radius);

delay(500);

setcolor(BLACK);

circle(nx, ny, radius);

setcolor(YELLOW);

nx = x + cos(angle/3.5)\*120;

ny = y + sin(angle/3.5)\*120;

circle(nx, ny, radius);

delay(500);

setcolor(BLACK);

circle(nx, ny, radius);

setcolor(BLUE);

nx = x + cos(angle/3.5)\*80;

ny = y + sin(angle/3.5)\*80;

circle(nx, ny, radius);

delay(500);

setcolor(BLACK);

circle(nx, ny, radius);

}

}

int main() {

initwindow (800, 800);

circle (200, 200, 100);

// rotation(200, 200, 10);

CircumRotation(200, 200);

getch();

closegraph();

return 0;

}

# **OUTPUT:**







