Experiment No.10
Aim: To develop programs for making animations
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Experiment No. 10

Aim: To develop programs for making animations

Objective:
Draw an object and apply various transformation techniques to this object. Translation, scaling and rotation is applied to object to perform animation.

Theory:
- For moving any object, we incrementally calculate the object coordinates and redraw the picture to give a feel of animation by using for loop.

- Suppose if we want to move a circle from left to right means, we have to shift the position of circle along x-direction continuously in regular intervals.
- The below programs illustrate the movement of objects by using for loop and also using transformations like rotation, translation etc.
- For windmill rotation, we use 2D rotation concept and formulas.

Program:

```c
#include <stdio.h>
#include <conio.h>
#include <graphics.h>
#include <dos.h>

void main()
{
  clrscr();
  int gd = DETECT, gm, i;
  initgraph(&gd, &gm, "C:\\TURBOC3\\BGI");

  for (i = 0; i <= 100; i++)
  {
    // Clear screen to avoid overlapping
    cleardevice();

    // Draw expanding circles
    circle(319, 219 - i, 20 + i);
    circle(319, 219 + i, 20 + i);
    circle(299 - i, 239, 20 + i);
    circle(339 + i, 239, 20 + i);

    // Delay to create animation effect
    delay(100);
  }

  getch();
  closegraph();
}
```
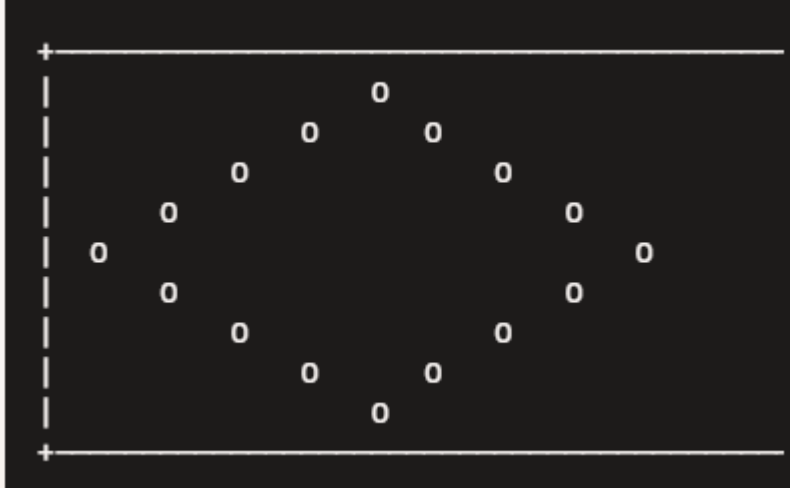
Output:

Conclusion - Comment on :
1. **Importance of story building**

Story building is crucial for a number of reasons:
- Engagement: A well-
  built story captivates the audience, holding their interest from start to finish.
- Relatability: Stories help convey messages, emotions, and experiences in a way that p
  eople can understand and relate to.
- Memory: Narratives make information more memorable by organizing it into a struct
  ured format.
- Connection: Stories foster a connection between the audience and the characters, creat
  ing empathy and investment in the outcome**.**

2. **Defining the basic character of story**

The basic character, or protagonist, is the heart of any story. Key aspects include:
- Background: The character's history, upbringing, and personal experiences.
- Personality: Traits, behaviors, and attitudes that define the character.
- Goals: What the character wants to achieve, which drives the plot.
- Flaws: Imperfections that make the character relatable and human.
- Growth: How the character evolves through the story's challenges.

3. Apply techniques to these characters

Creating compelling characters involves several techniques:

- Show, Don't Tell: Reveal character traits through actions, dialogue, and interactions rather than exposition.

- Conflict: Place characters in challenging situations that force them to grow and change.

- Dialogue: Use dialogue to reveal personality, motivations, and relationships.

- Depth: Create multi-dimensional characters with complex emotions and motivations.

- Consistency: Maintain character consistency unless deliberate growth or change is part of the story arc.

- Internal Struggle: Highlight internal conflicts that reflect deeper psychological or emotional struggles.