Aim: To develop programs for making animations such as

1. Circle moving from top to down and vice versa

Objective:

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

Theory:

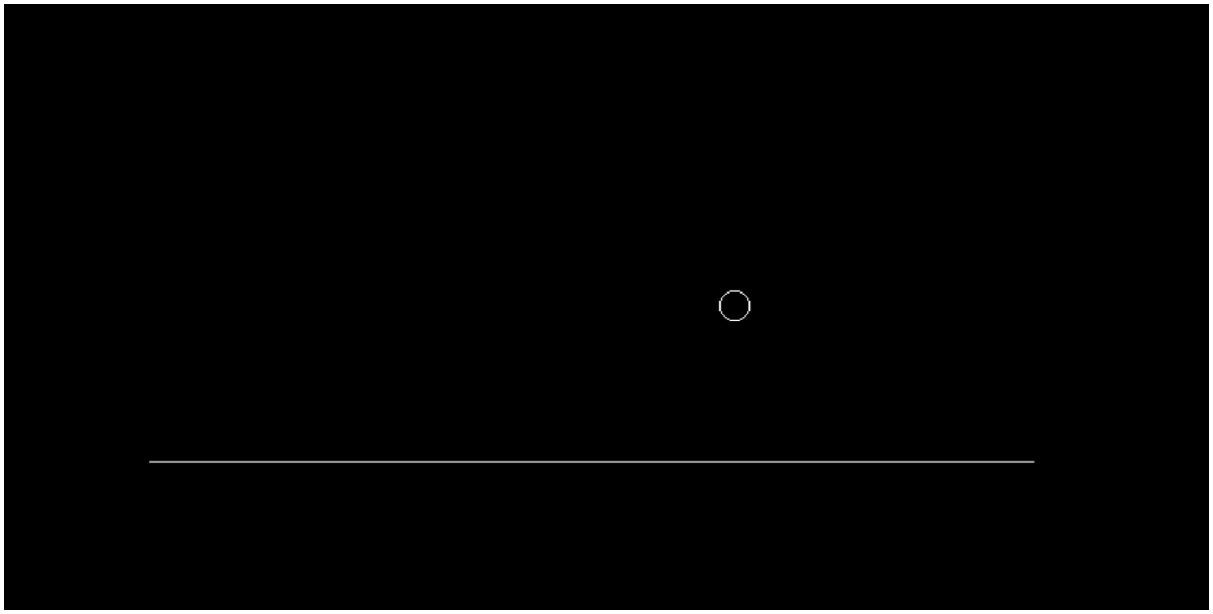
- For moving any object, we incrementally calculate the object coordinates and redraw the picture to give a feel of animation by using for loop.
- Suppose if we want to move a circle from left to right means, we have to shift the position of circle along x-direction continuously in regular intervals.
- 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:

```
#include<stdio.h>
#include<conio.h>
#include<graphicss.h>
void main()
{
 int gd=DETECT,gm,i,x=0;
 initgraph(&gd,&gm,"C:\\TURBOC3\\BGI");
 for(i=0;i<=300;i++)
 {
  line(0,310,600,310);
  circle(i,i,10);
  delay(8);
  cleardevice();
 }
 for(i=300;i>=0;i--)
 {
  line(0,310,600,310);
  x++;
```

```
    circle(300+x,i,10);
    delay(7);
    cleardevice();
    }
    getch();
}
```

Output:



Conclusion - Comment on :

1. Importance of story building:- Powerful tools for conveying messages and ideas.
2. Defining the basic character of story:-Silhouette, palette and exaggeration.
3. Apply techniques to these characters:-Physical, description,action.