

## Vidyavardhini's College of Engineering & Technology

### Department of Computer Engineering

**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<graphics.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--){
```

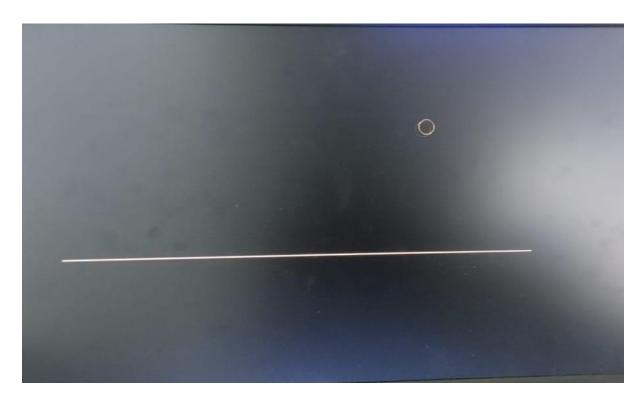
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```
line(0,310,600,310);
x++;
circle(300+x,i,10);
delay(7);
cleardevice();
}
getch();
}
```

### **Output:**





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#### **Conclusion -** Comment on :

- 1. Importance of story building
- 2. Defining the basic character of story
- **3.** Apply techniques to these characters

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