Experiment No. 10

Aim: To develop programs for making animations such as

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.

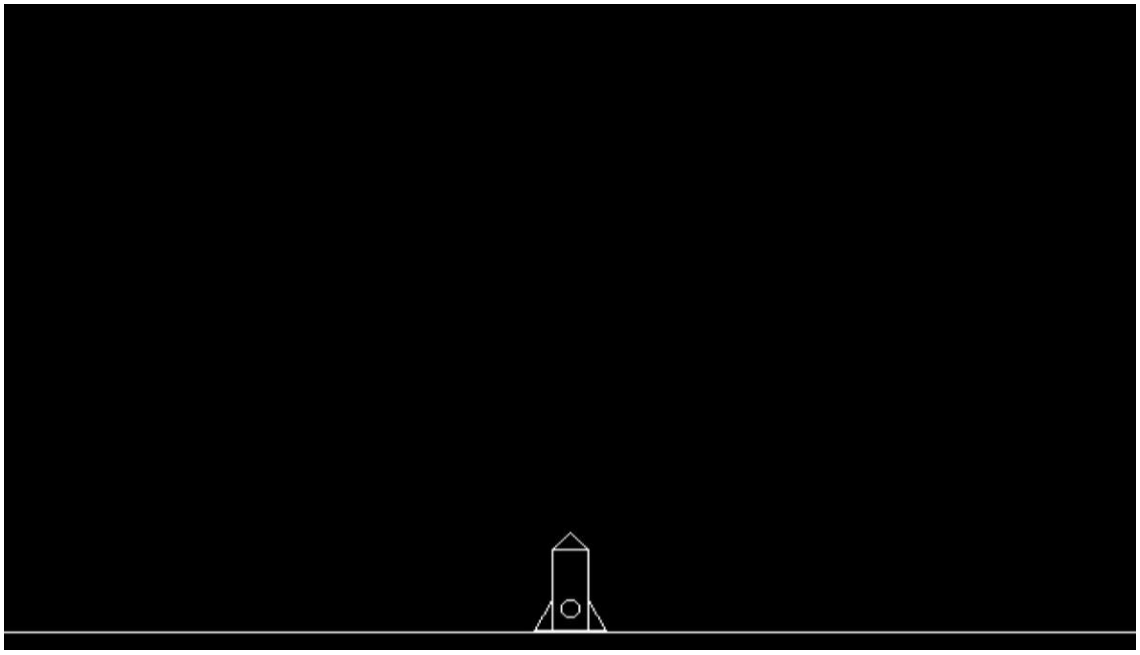
Program:

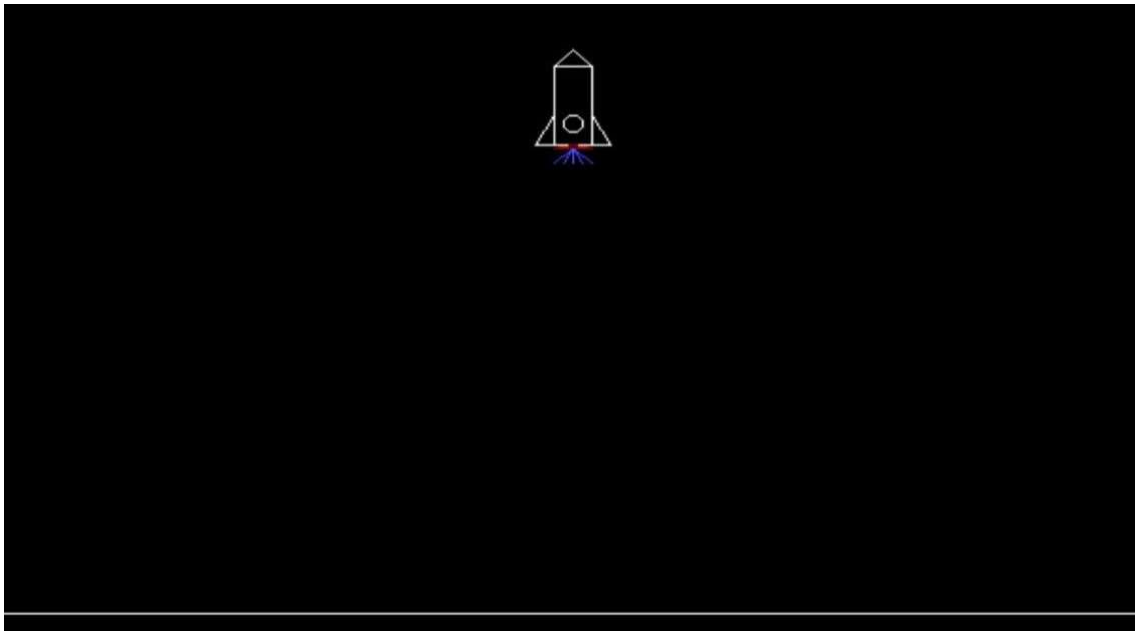
```
#include<graphics.h>
#include<stdlib.h>
#include<stdio.h>
#include<conio.h>
#include<dos.h>
int nk=0;
void main()
{
int gdriver=DETECT,gmode;
int x,y,i,j;
j=0;
initgraph(&gdriver,&gmode,"C:\\TURBOC3\\BGI");
for(i=0;i<=700;i++)
{
setcolor(WHITE);
line(0, getmaxy()-10, getmaxx(), getmaxy()-10);
```

```
//rectangle for rocket
if(i>100)
{
j++;
rectangle(310,420-j,330,468-j);
line(310,468-j,300,468-j);
line(330,468-j,340,468-j);
line(340,468-j,330,450-j);
line(300,468-j,310,450-j);
line(310,420-j,320,410-j);
line(320,420-j,330,420-j);
line(330,420-j,320,410-j);
circle(320,455-j,5);
setcolor(RED);
line(320,468-j,310,470-j);
line(320,468-j,330,470-j);
line(310,470-j,330,470-j);
setcolor(rand());
line(320,470-j,310,479-j);
line(320,470-j,315,479-j);
line(320,470-j,320,479-j);
line(320,470-j,325,479-j);
line(320,470-j,330,479-j);
}
else
{
if(i>80)
{
nk++;
circle(325,468,0+nk);
delay(100);
}
rectangle(310,420,330,468);
line(310,468,300,468);
line(330,468,340,468);
line(340,468,330,450);
line(300,468,310,450);
line(310,420,320,410);
line(320,410,330,420);
circle(320,455,5);
}
delay(15);
```

```
if(i>100)
{
cleardevice();
}
}
getch();
closegraph();
} }
```

Output:





Conclusion - Comment on :

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

1. Importance of Story Building:

- Story building is a fundamental step in creating compelling narratives, whether in literature, film, or any form of storytelling.
- It establishes the foundation of the plot, characters, and the world in which the story unfolds.
- Story building helps authors and creators map out the journey of the narrative, ensuring coherence and engagement.

2 . Defining the Basic Character of the Story:

- The basic character of the story includes the central theme, the protagonist, and the primary conflict.
- Defining these elements sets the tone and direction of the narrative, giving it a clear purpose and focus.
- It helps convey the message or moral of the story to the audience.

3. Applying Techniques to These Characters:

- Techniques are essential for developing characters and plotlines effectively.
- Techniques can include character development, foreshadowing, conflict resolution, and more.
- Applying techniques to the basic character of the story adds depth and complexity, making the narrative more engaging and relatable.

In summary, story building is the first step in crafting a compelling narrative, defining the central elements and setting the stage for the application of storytelling techniques. It's a critical phase in the creative process, ensuring that the story captures the audience's imagination and interest.