

Foundations of Computer Science

PROJECT BOUNCE UNIT QUIZ

WRITE A PROGRAM THAT WILL DO THE FOLLOWING:

10 - points: Create a drawing space 500 x 500, make the background black

10 - points: Set fill color to blue

10 - points: Create the follow variables: bSize, xPos, yPos, xSpeed. The variables
xCenter=width/2; yCenter=height/2; bSize=20; xSpeed=1.

10 - points: Draw a circle 20 x 20 at xCenter, yCenter.

10 - points: Make the ball (circle) move to the RIGHT until it travels off the screen WITHOUT leaving any trails.

POSSIBLE SOLUTION

```
float bSize;           // ball size
float xPos;            // starting x-axis position
float yPos;            // starting y-axis position
int xSpeed;            // speed at which ball travels on x-axis

void setup()
{
  background(0);       // sets background to black
  size(500,500);       // establishes a drawing space of 500x500
  bSize=20;            // sets ball size to 20
  xPos=width/2;        // sets initial starting location at center of x-axis
  yPos=height/2;       // sets initial starting location at center of y-axis
  xSpeed=1;
}

void draw()
{
  background(0);       // re-draws background with each iteration
  fill(0,0,255);       // sets ball color to BLUE
  ellipse(xPos,yPos,bSize,bSize); // draws the circle
  xPos=xPos+xSpeed;    // increases xPosition by one with each run
}
```