VBugs Worksheet 2

Name: _____

Year Level: _____ **SOLUTIONS** _____

Answers to Part 1

What is happening on your screen? Describe the output below:

> *There is nothing on the screen at this point. Just back background.*

Exercise 1: *Loading images into your program*

1. Write the complete code for LoadImages() sub into the area below.

```
Answer:
…

Private Sub LoadImages()

        NewImage("back", "back.png")
        NewImage("photo", "photo.png")


End Sub
…
```

2. Why do we need the first parameter in `NewImage()`? Write your answer in the area below.

> *This parameter represents the name of image in our program, so you can refer to the particular image loaded in your program by calling its name.*

Answers to Part 2

What do you think DrawBitmap() sub does? Write your answer in the area below.

> *DrawBitmap() function draws the picture at a particular position n the screen.*

Exercise 1: *Drawing other images on the screen*

1. Tell the computer to draw photo.png on the screen. The code for this needs to be inside the Game Loop. Write the code that you entered to achieve this in the area below:

```
Answer:
…
    SwinGame.Graphics.ClearScreen()

    Graphics.DrawBitmap(GameImage("photo"), 100, 30)

    'Refreshes the Screen and Processes Input Events
…
```

Answers to Part 3

Write the complete code for the LoadFonts() sub in the area below:

```
Answer:

…

    Private Sub LoadFonts()
        NewFont("ArialLarge", "arial.ttf", 80)
        NewFont("Courier", "cour.ttf", 16)
        NewFont("BeanTown", "BEANTOWN.ttf", 60)
    End Sub

…
```

Exercise 1: *Drawing the text by using loaded true type font*

1. Open GameLogic.vb from the Solution Explorer. Use `Text.DrawText("Text to draw", Color.(Black), GameFont("BeanTown"), posX, posY)` to write the code that tells the computer to draw text with a new font in the area below:

```
Answer:

…

SwinGame.Graphics.ClearScreen()

Text.DrawText("I'm a cool bug!", Color.Black,
GameFont("BeanTown"), 450, 10)

 'Refreshes the Screen and Processes Input Events
…
```

Answers to Part 4

Exercise 1: *Colors with RGB and RGBA*

1. What is the color and how much could you see it with the following ARGB values: (255, 255, 0, 0). Write the color and mark the transparency in the area below:

Color: red

Transparency:

2. What is the color and how much could you see with the following ARGB values: (30, 0, 255, 0). Write the color and mark the transparency in the area below:

Color: blue

Transparency:

3. What is the color and how much could you see with the following values of ARGB: (0, 0, 0, 255). Write the color and mark the transparency in the area below:

Color: green

Transparency:

Exercise 2: *Drawing rectangle with the customized color*

1. Draw one rectangle of each of the colors from the previous exercise. Use `Color.FromArgb(redVal, greenVal, blueVal, alphaVal)` as the color of rectangle. Write the code that you entered to achieve this in the area below:

```
Graphics.FillRectangle(Color.FromArgb(255, 255, 0, 0), 700, 500,
100, 100)

Graphics.FillRectangle(Color.FromArgb(30, 0, 255, 0), 600, 500,
100, 100)

Graphics.FillRectangle(Color.FromArgb(0, 0, 0, 255), 500, 500,
100, 100)
```