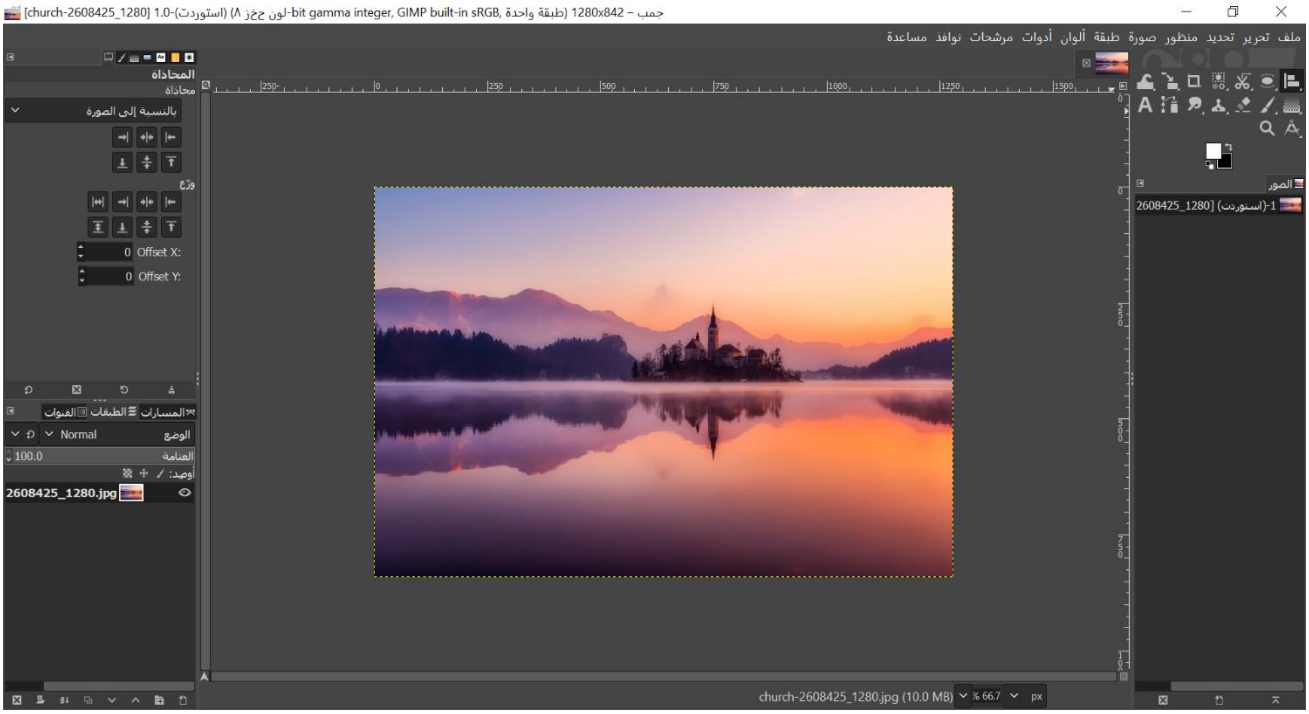
SECTION A

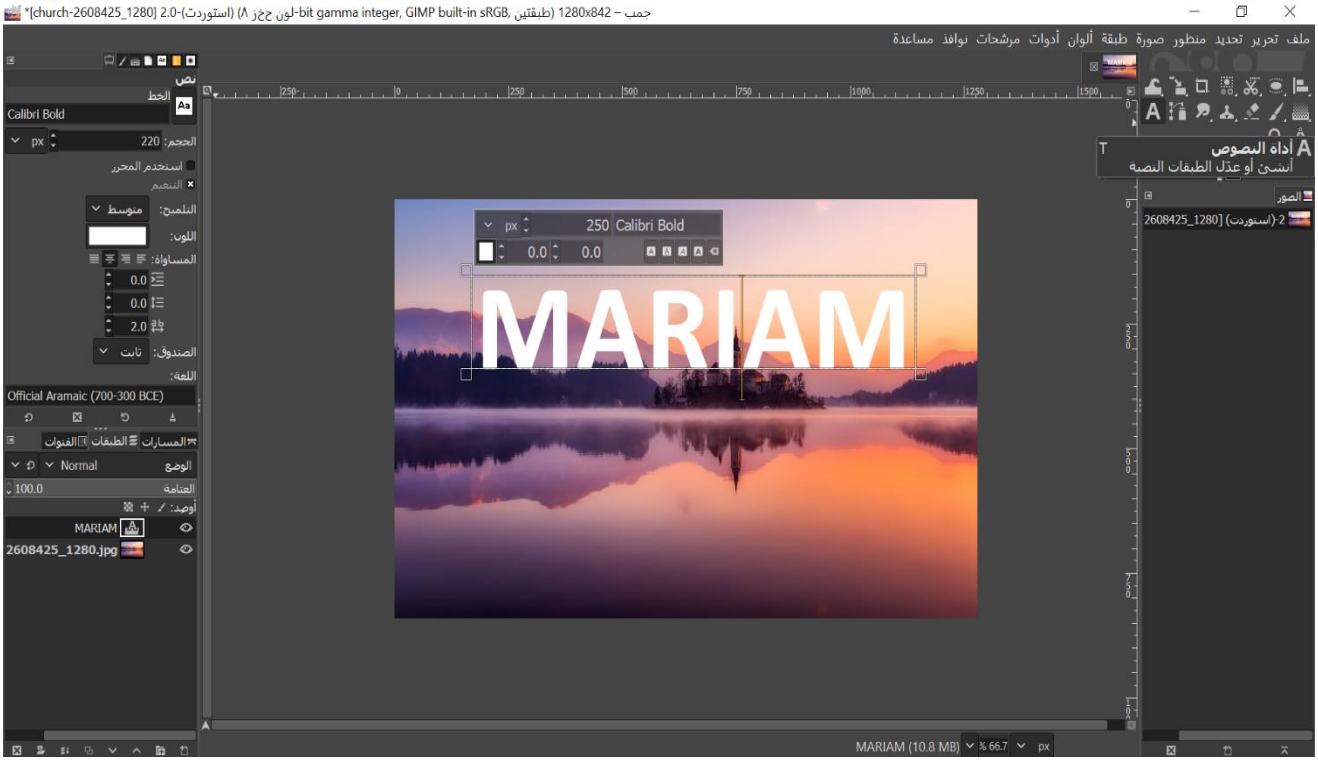
Q1) Write your name as **TEXT REFLECTION** using GIMP Application.

Answer

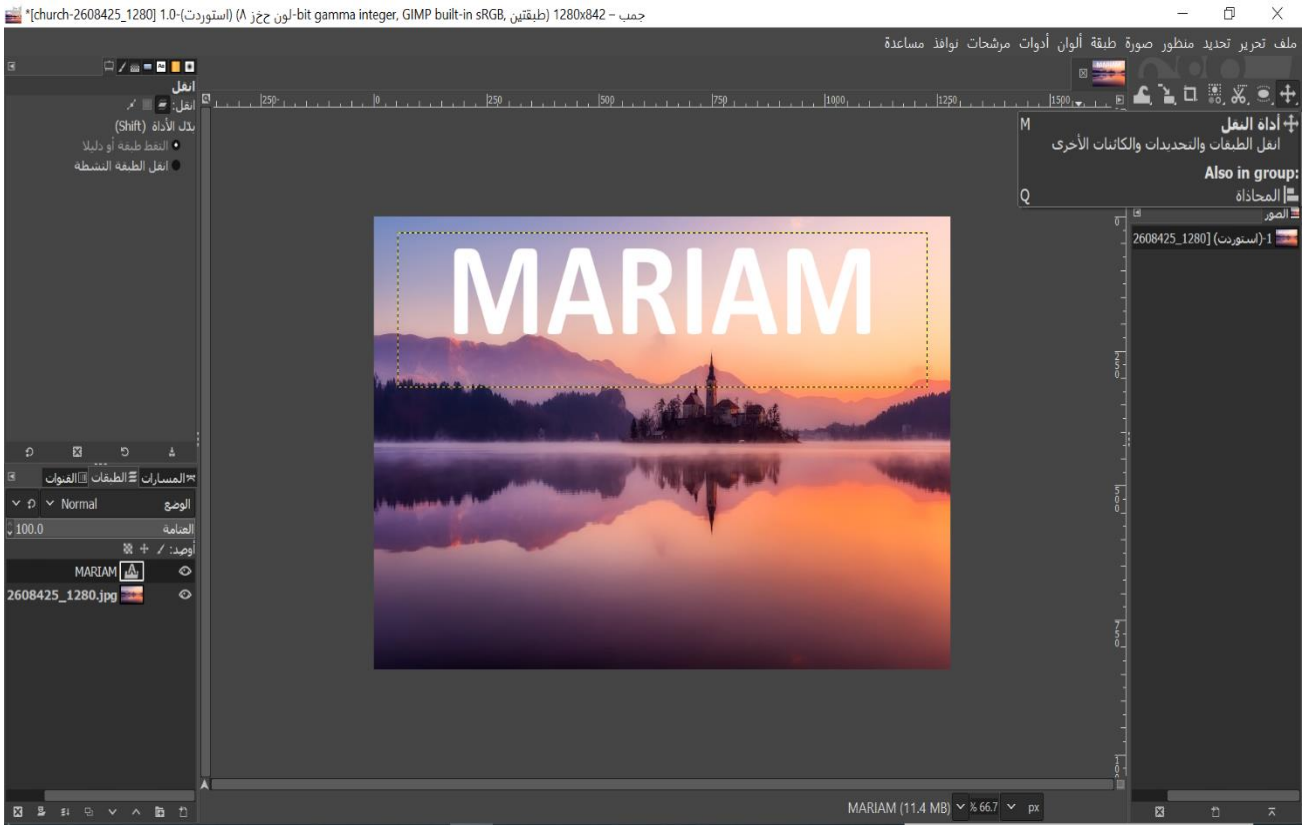
1) Open an image file to set the background as image



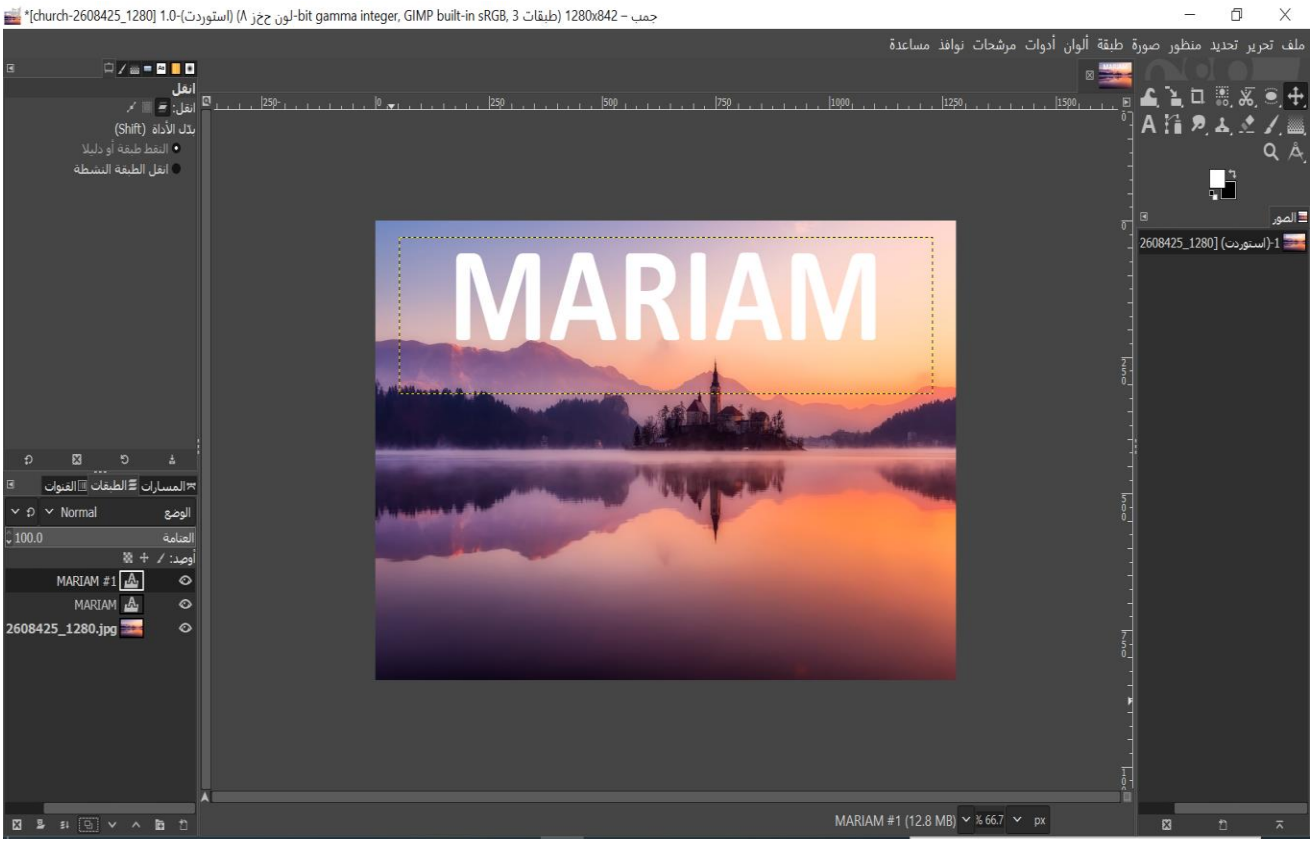
2) Adding text and set the font size color and family using text tool



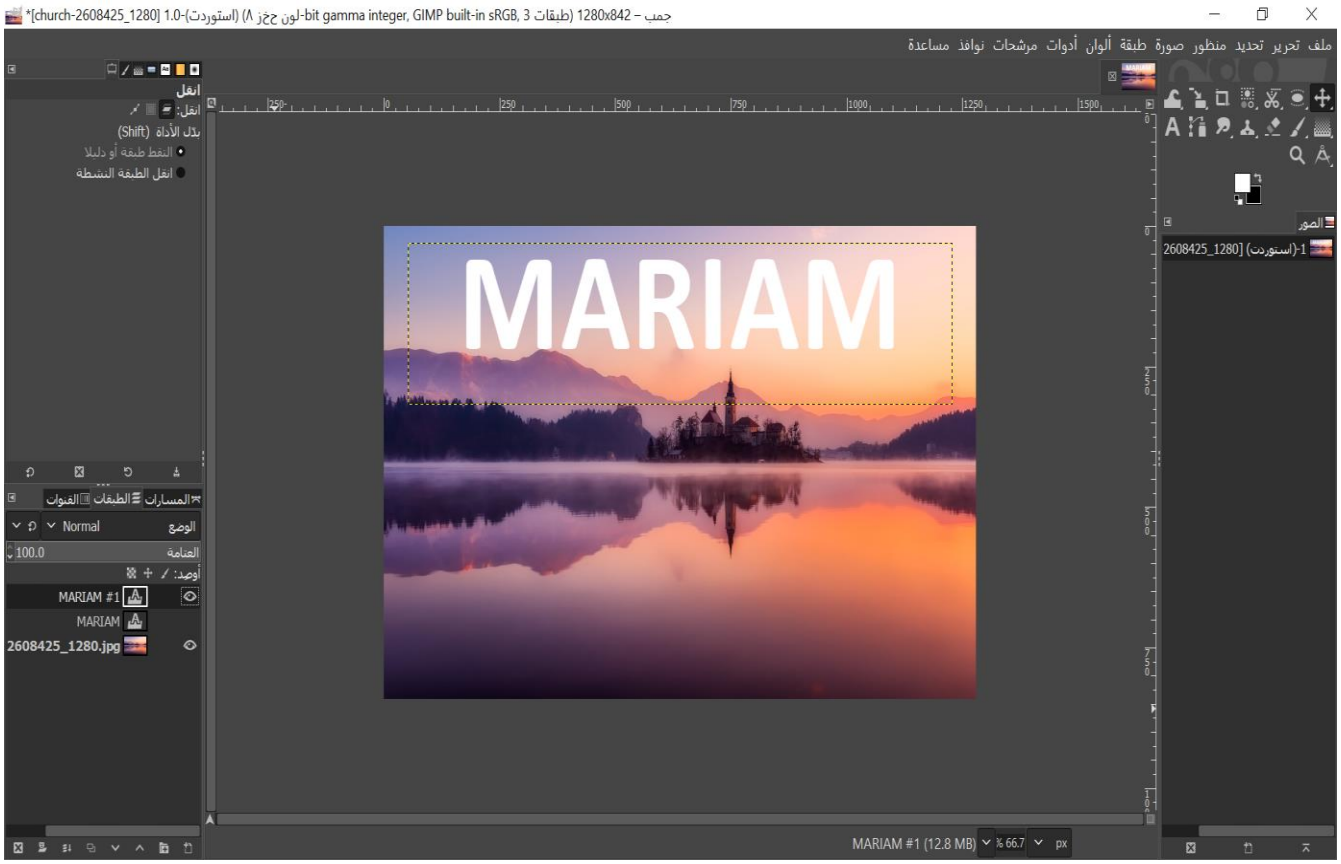
3) Justifying the position of text layer using the movement tool



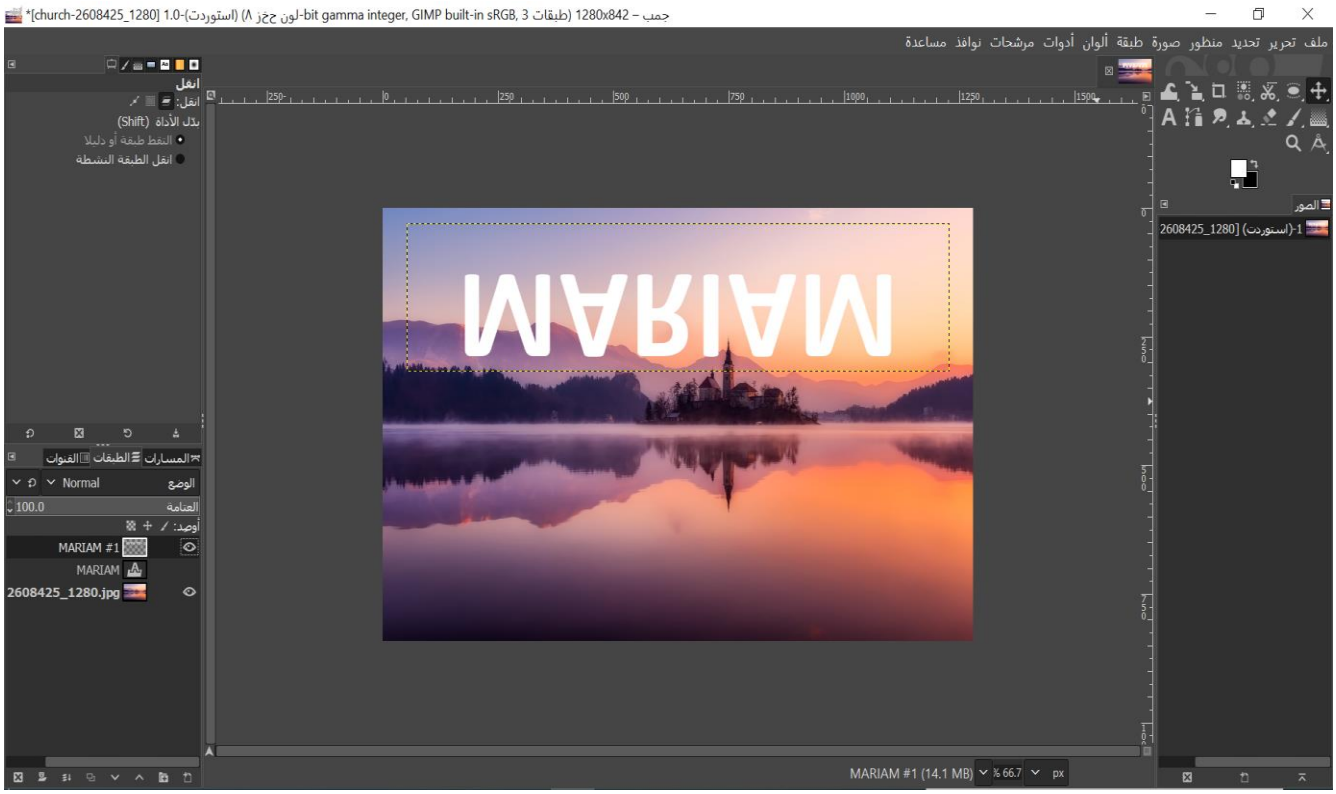
4) Duplicate the text layer



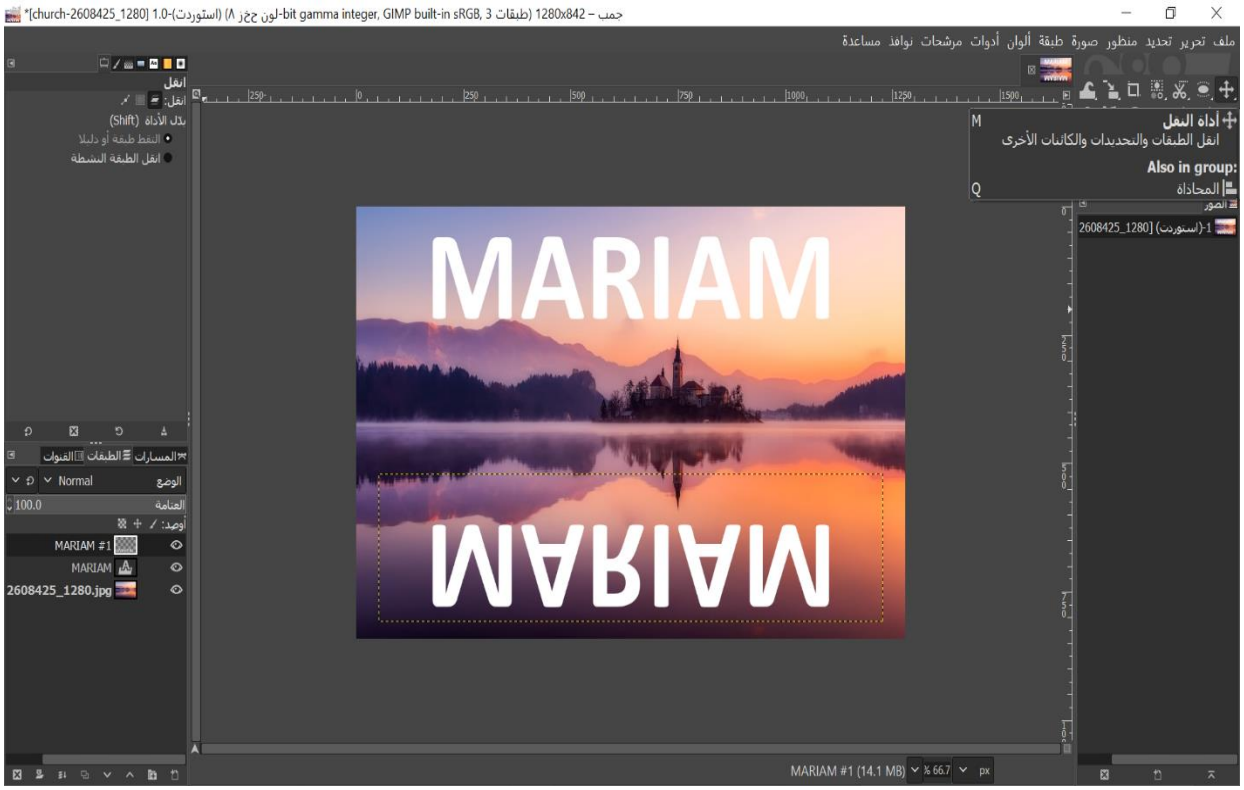
5) Hide the text layer and make sure you select the duplicated layer



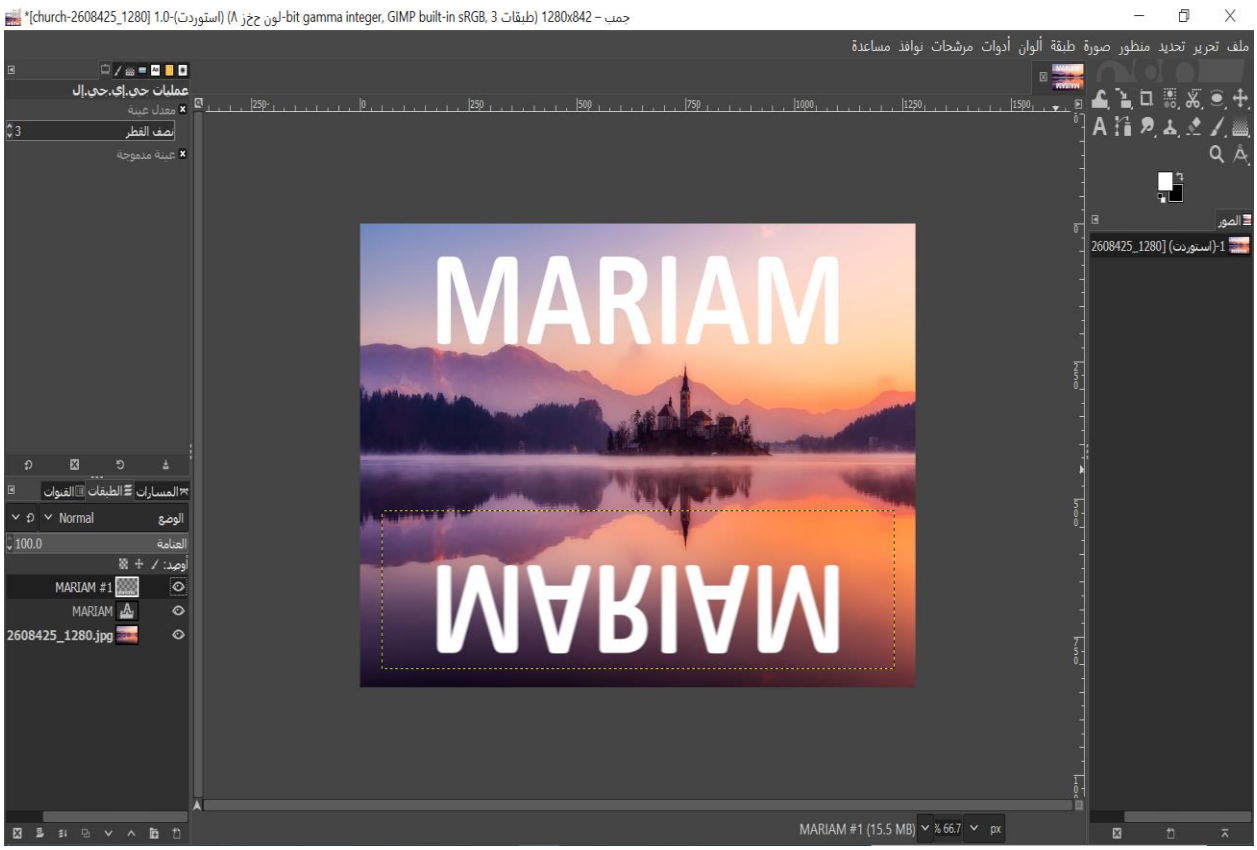
6) Flip the duplicated layer vertically, (select Layer -> Transformation -> Flip vertically)



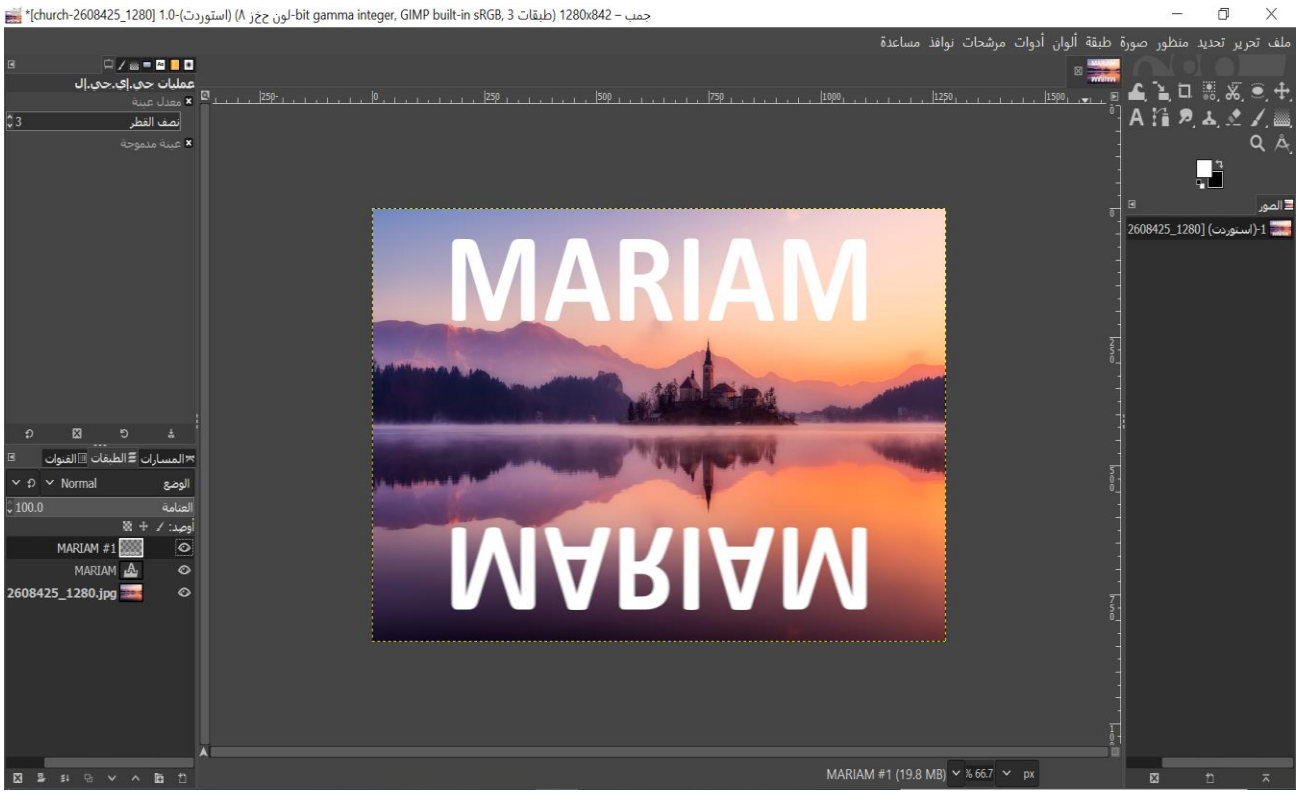
7) After appearing the text layer and justify the position of the reflected text



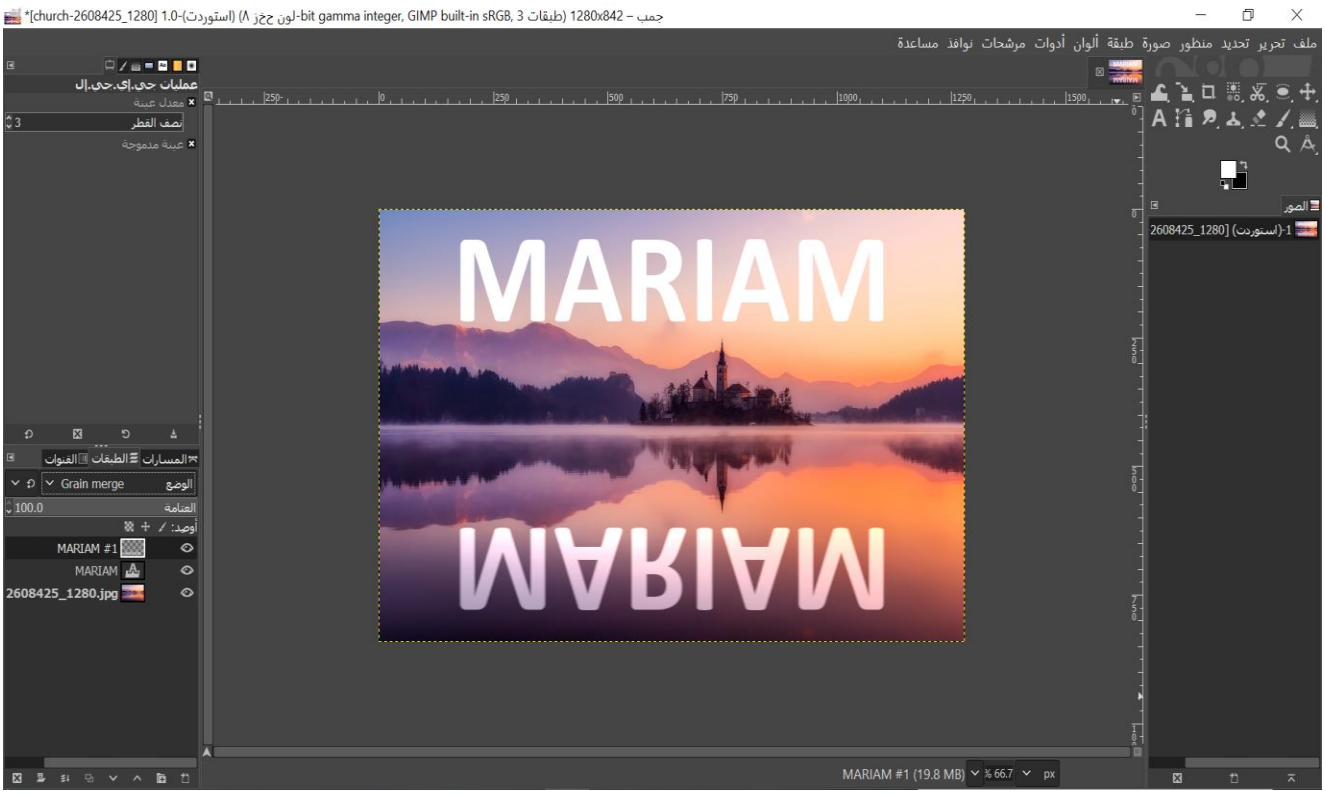
8) Reflected text after applying the Motion Linear Blur filter with length of 5 and 0 angle to make it more realistic



9) expand the reflected text layer to the image size to merge the texture of duplicated layer and background image, (select Layer -> Layer to image size)



10) Applying the Grain Merge mode for the duplicated layer

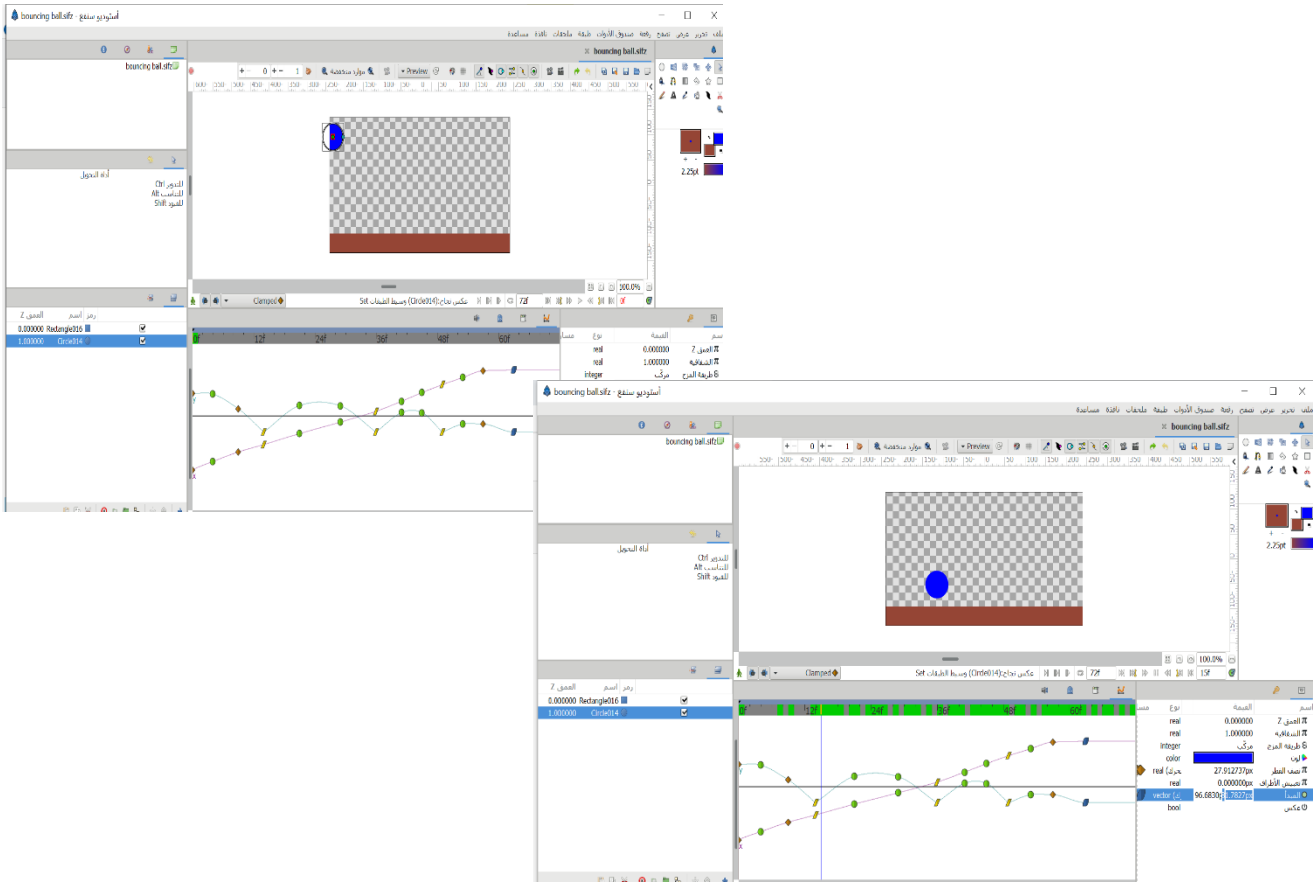


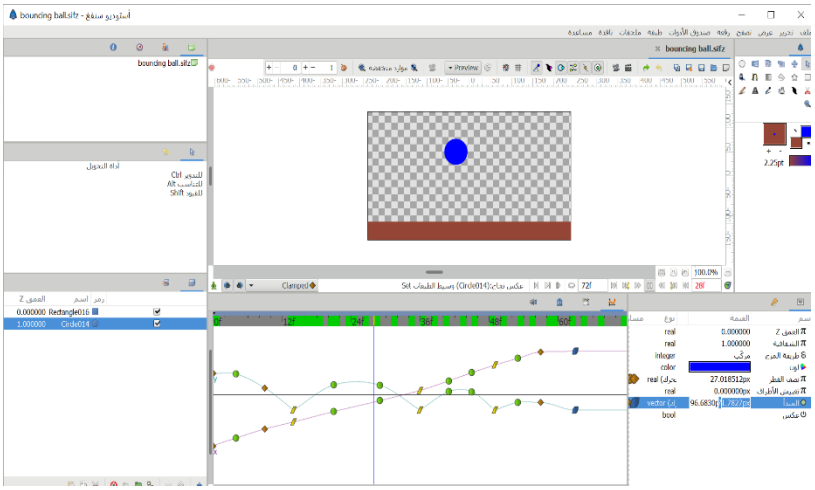
The final result

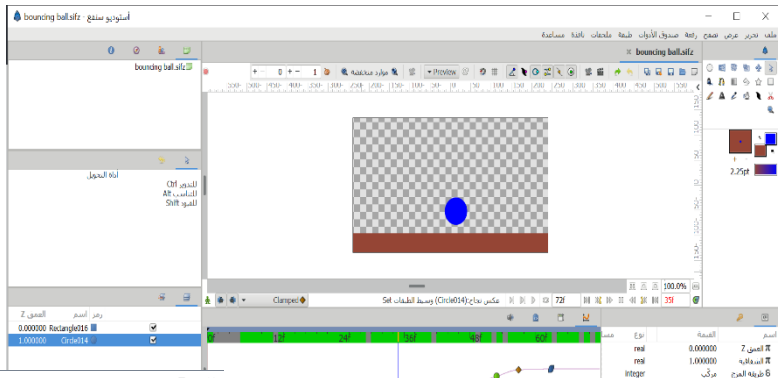
Q2) Implement Bouncing ball animation using SYNFIG Application and render the animation as a video file. Embed this video file in the web page using HTML.

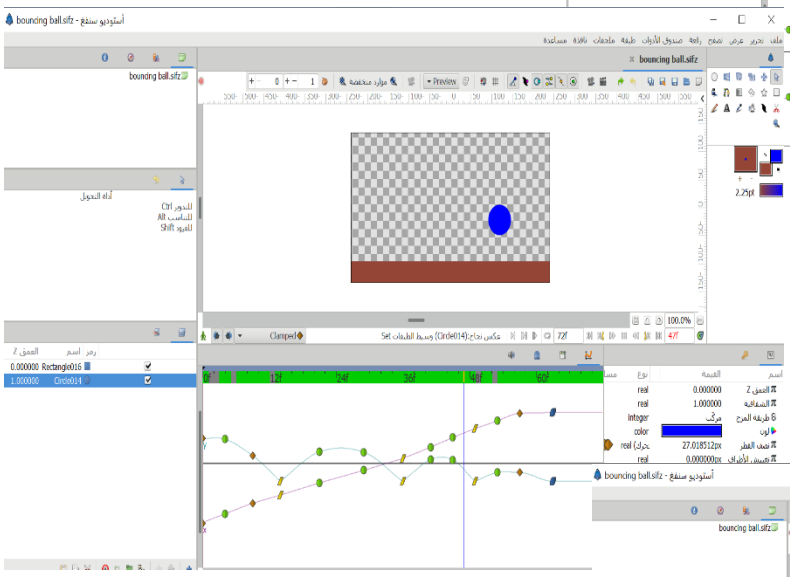
Answer

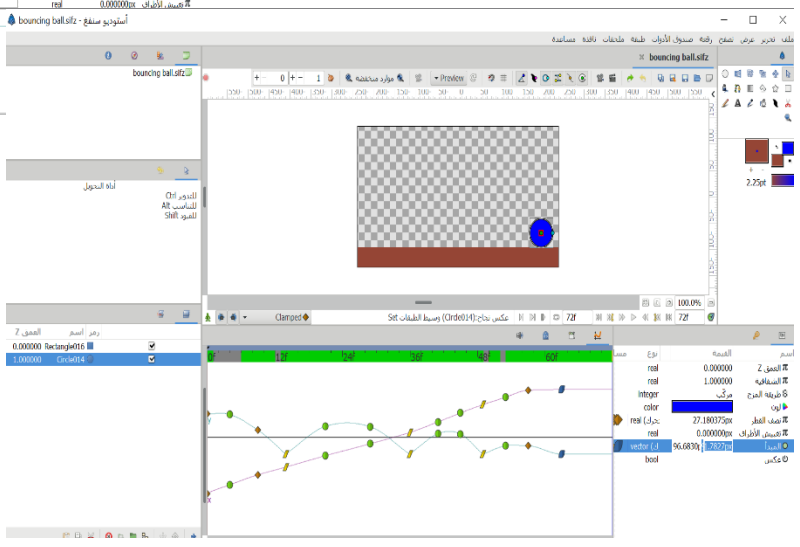
Here are some of print screens for bouncing ball animation implementation





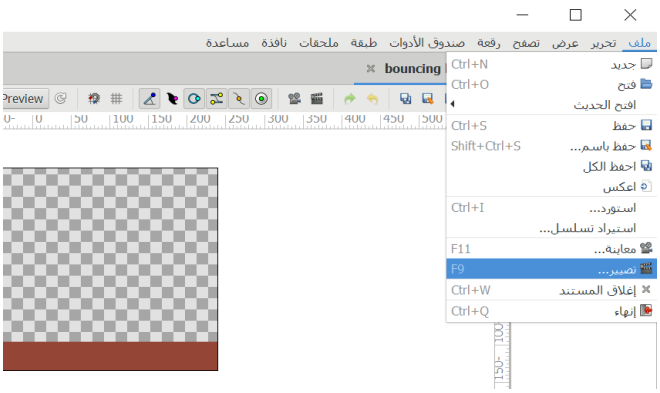




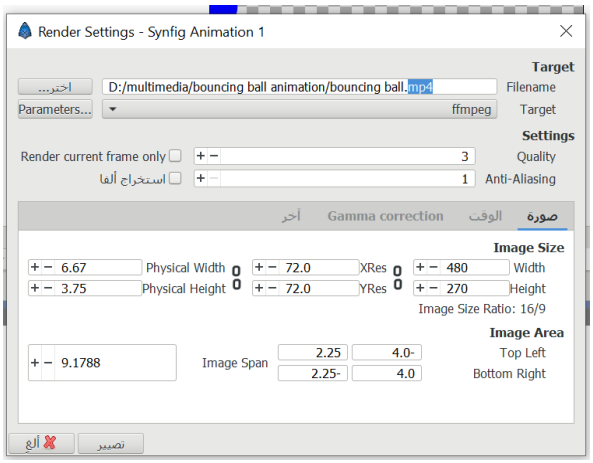


To render the animation as a video file

Select file -> Render

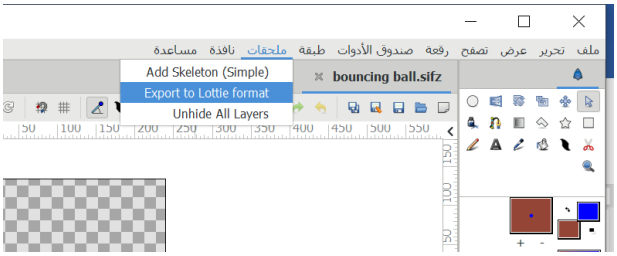


And set target to **ffmpeg** and change the extension of file to **.mp4** , and press enter

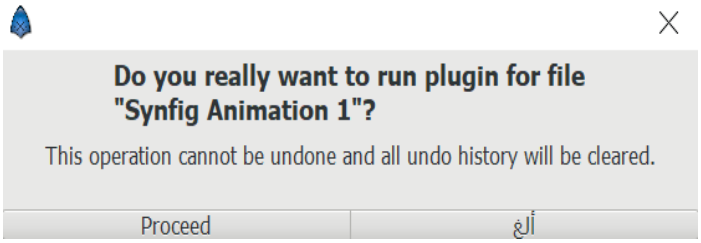


To embed the video to a web page as an html file, it must export animations to Lottie JSON format, which allows to embed them into web pages. To do this, follow these steps:

Select plug-in -> Export to Lottie format



Then press Proceed



This process will create 3 files in the same directory as your animation:

bouncing ball.sifz.D007779F.html,

bouncing ball.sifz.D007779F.json

bouncing ball.sifz.D007779F.log.

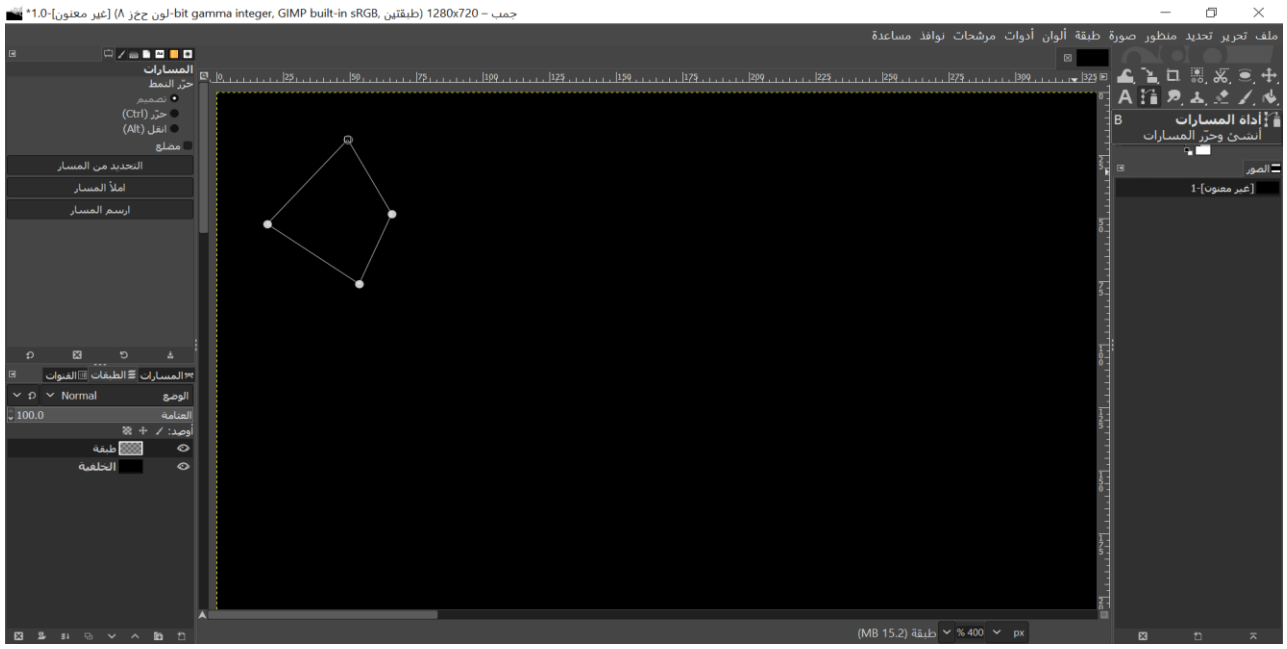
bouncing ball.sifz.D007779F.html can be used to watch exported animation in browser.

SECTION B

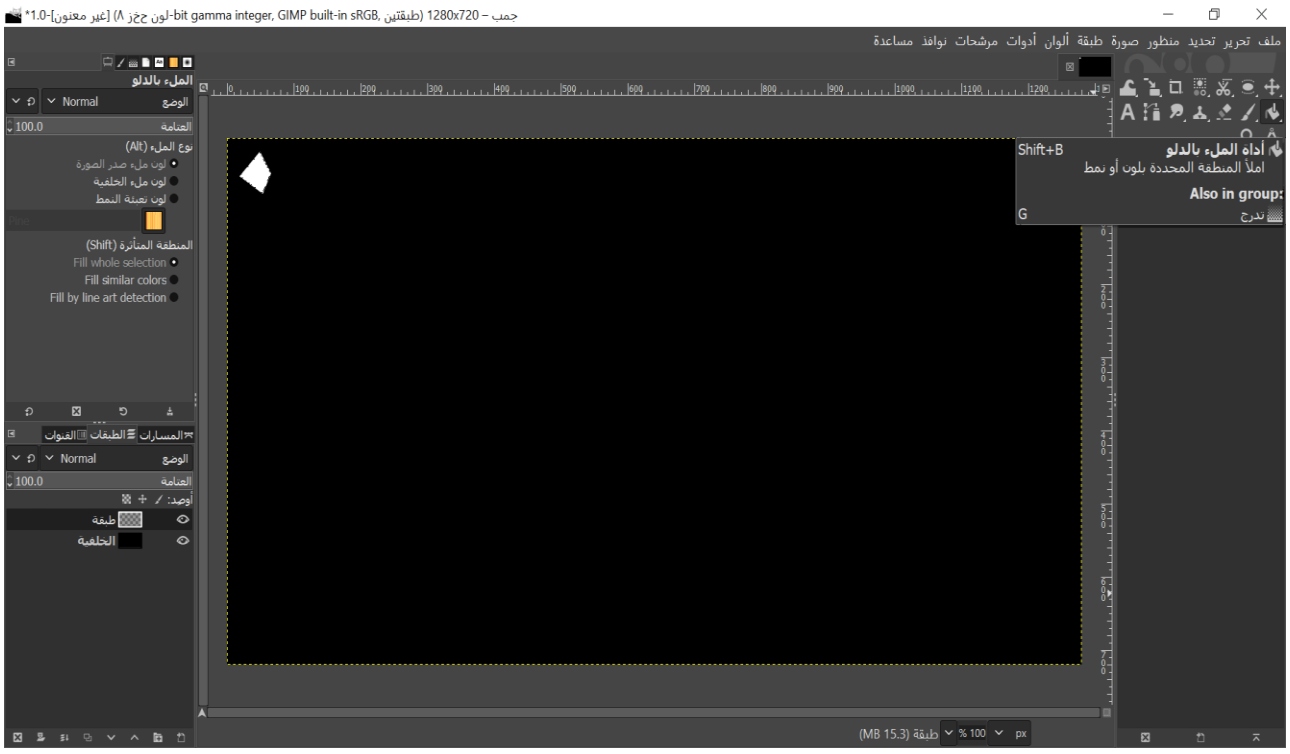
Q1) 1. Demonstrate the Explosion effect using any of your favorite shapes using GIMP.

Answer

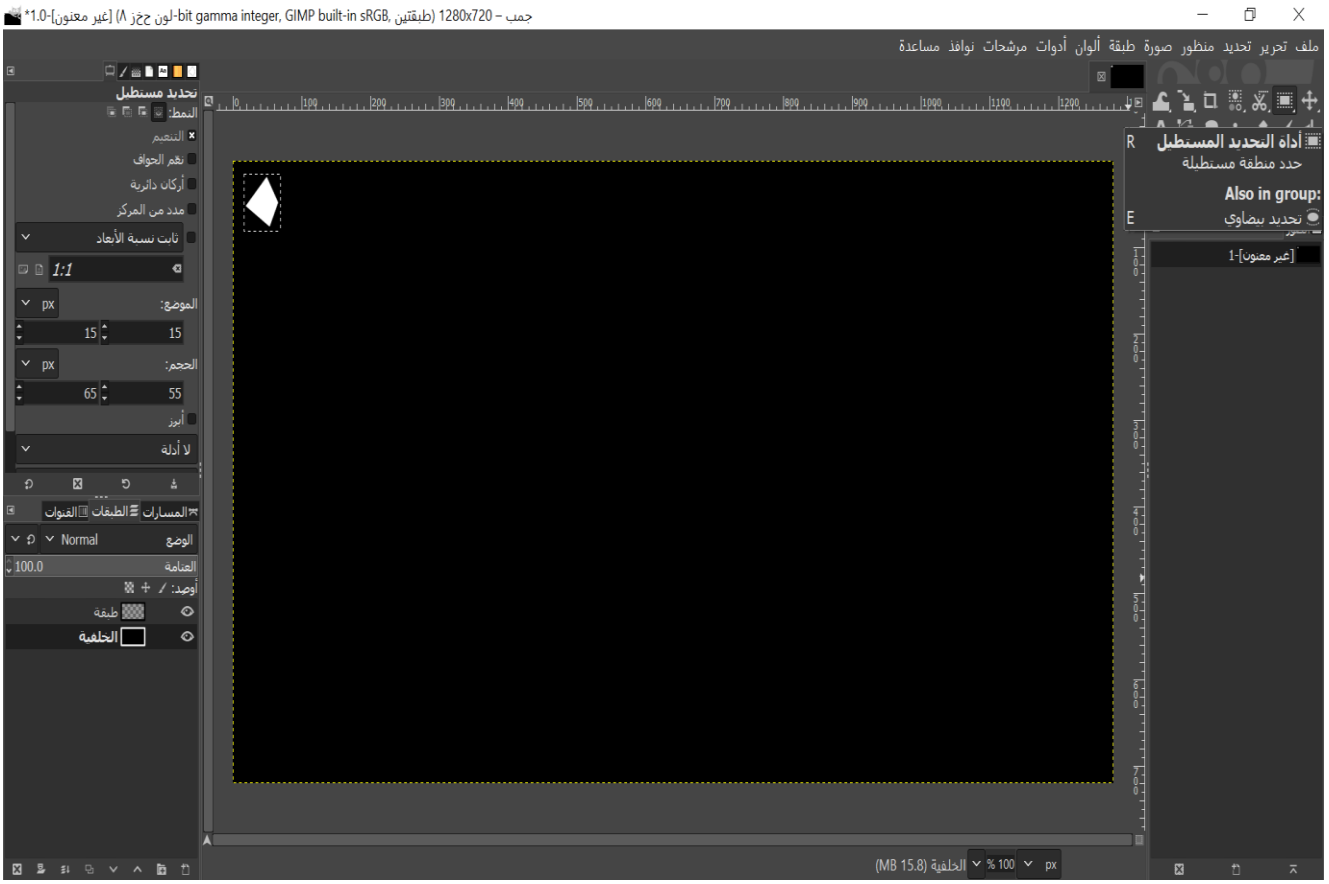
1) Draw shape using path edit tool.



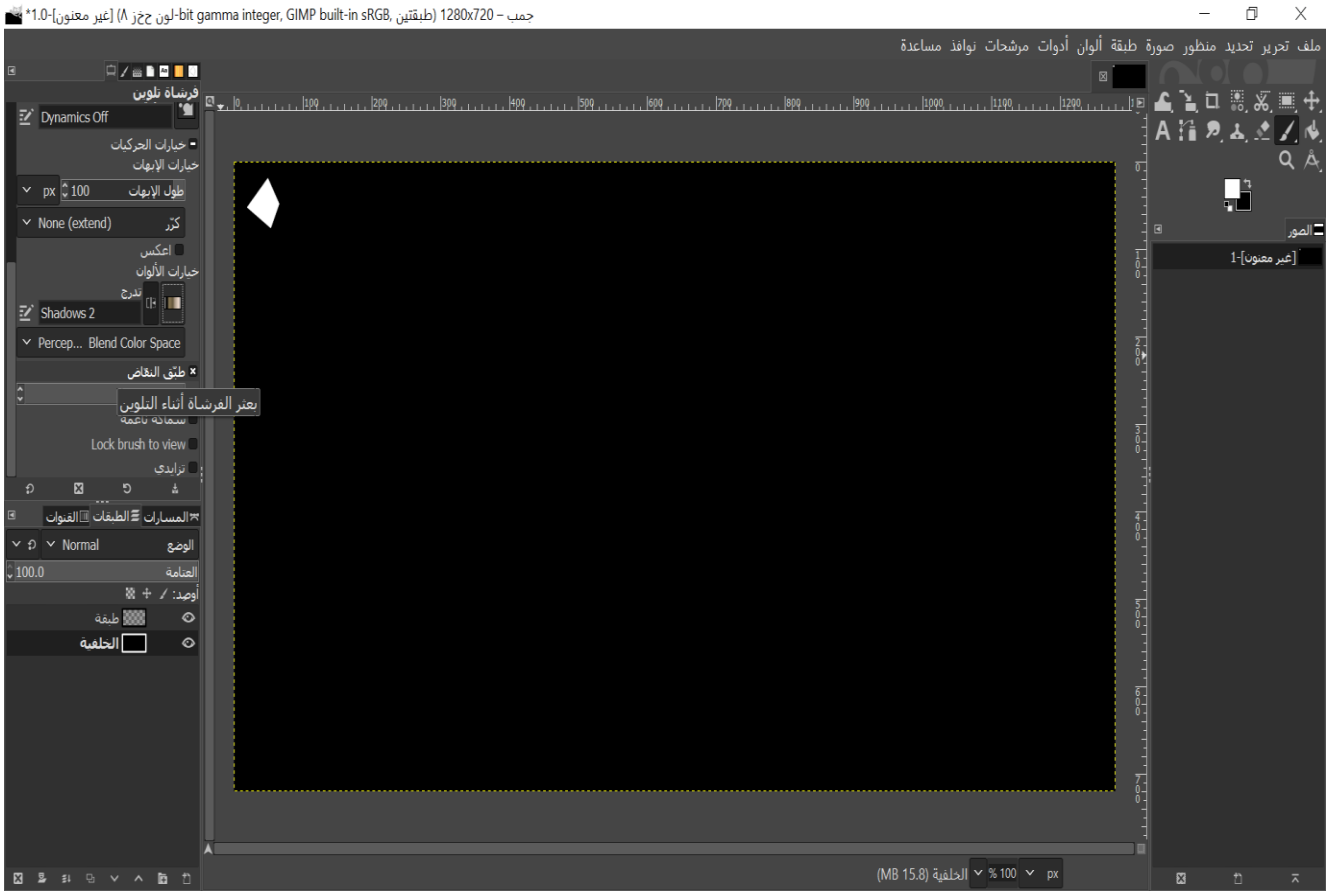
2) After selecting the path by applying path to selection tool (select Windows -> Docker dialogs -> paths)



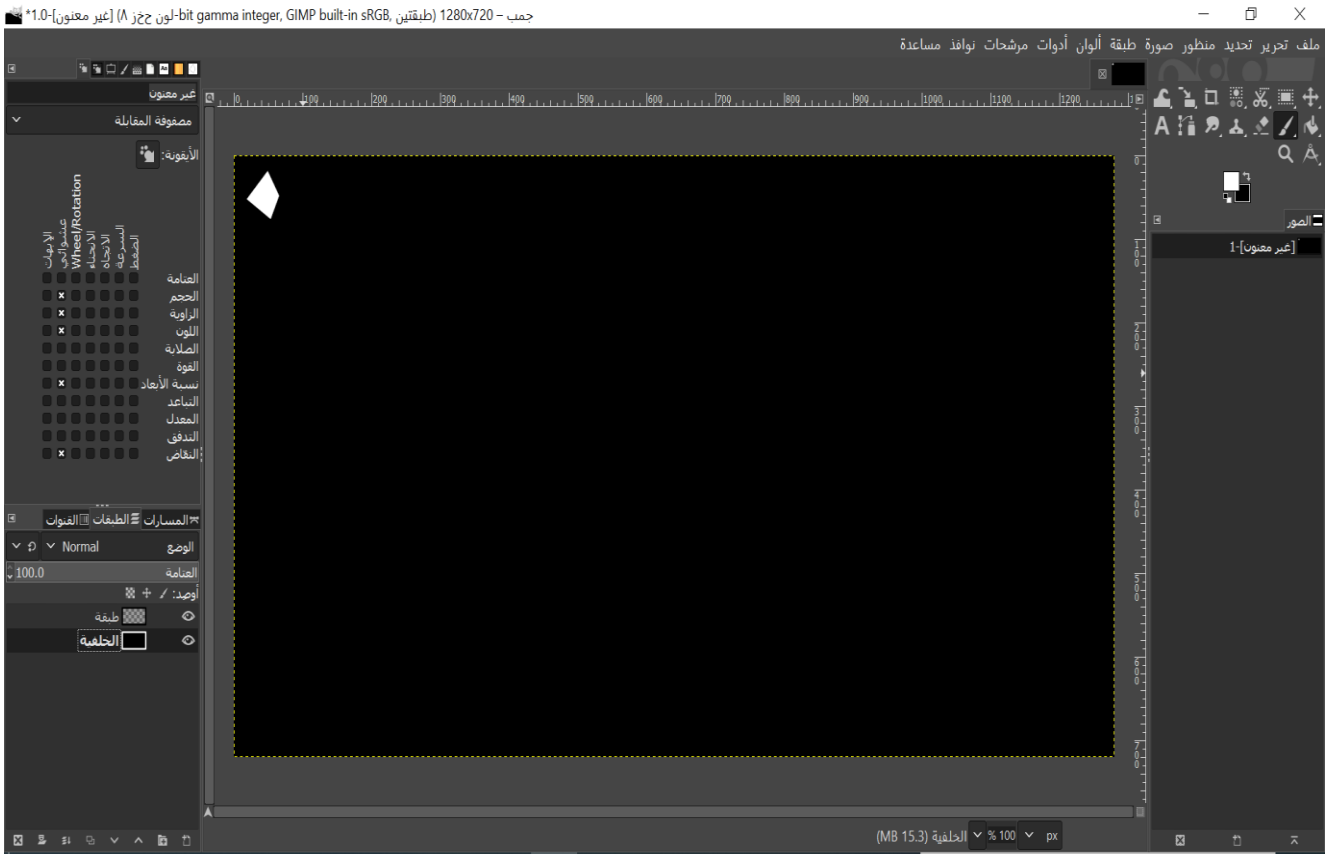
3) After grab the rectangle tool to draw a selection around the shape.



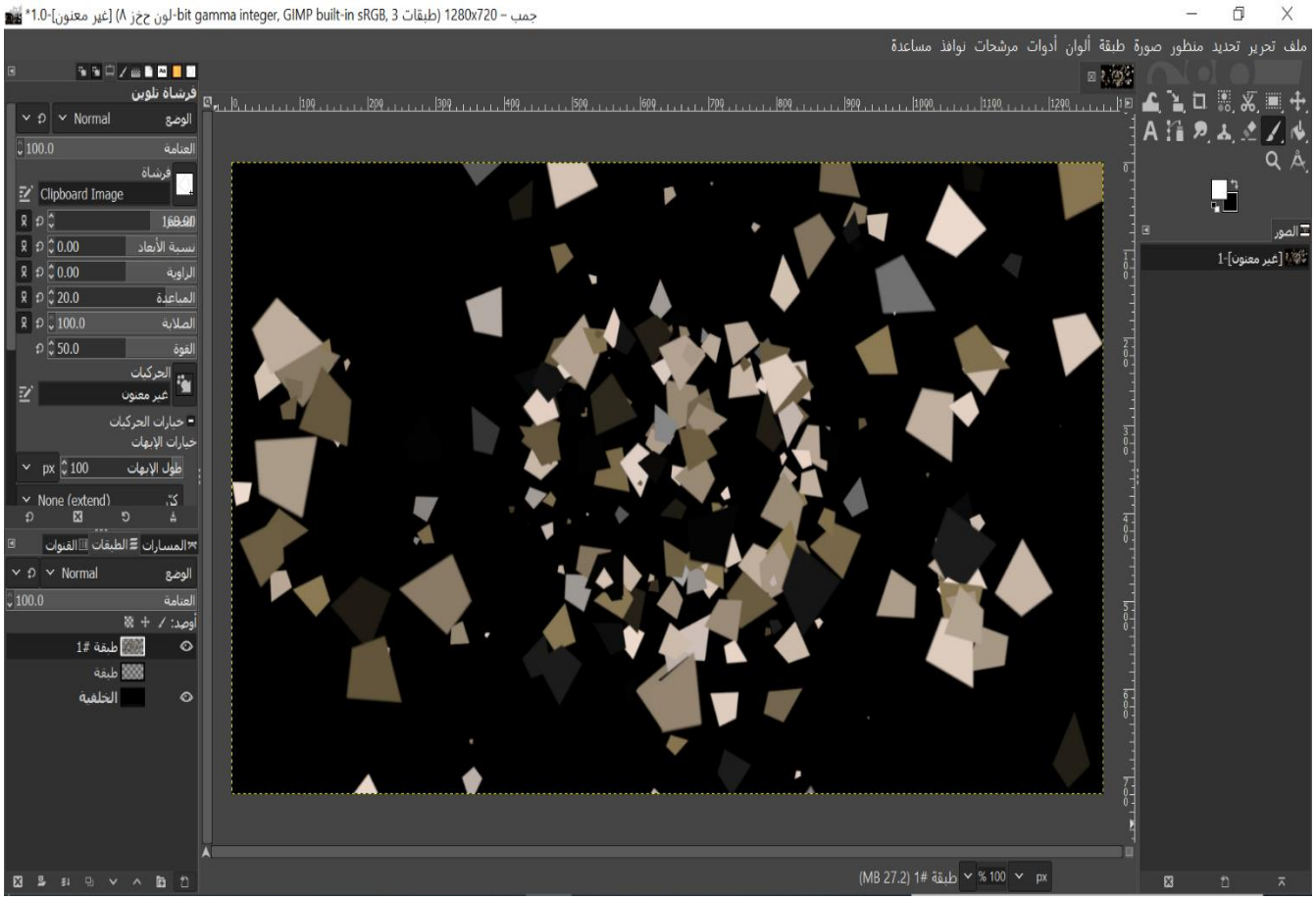
4) After copying the shape and selecting paintbrush tool and then justify gradient.



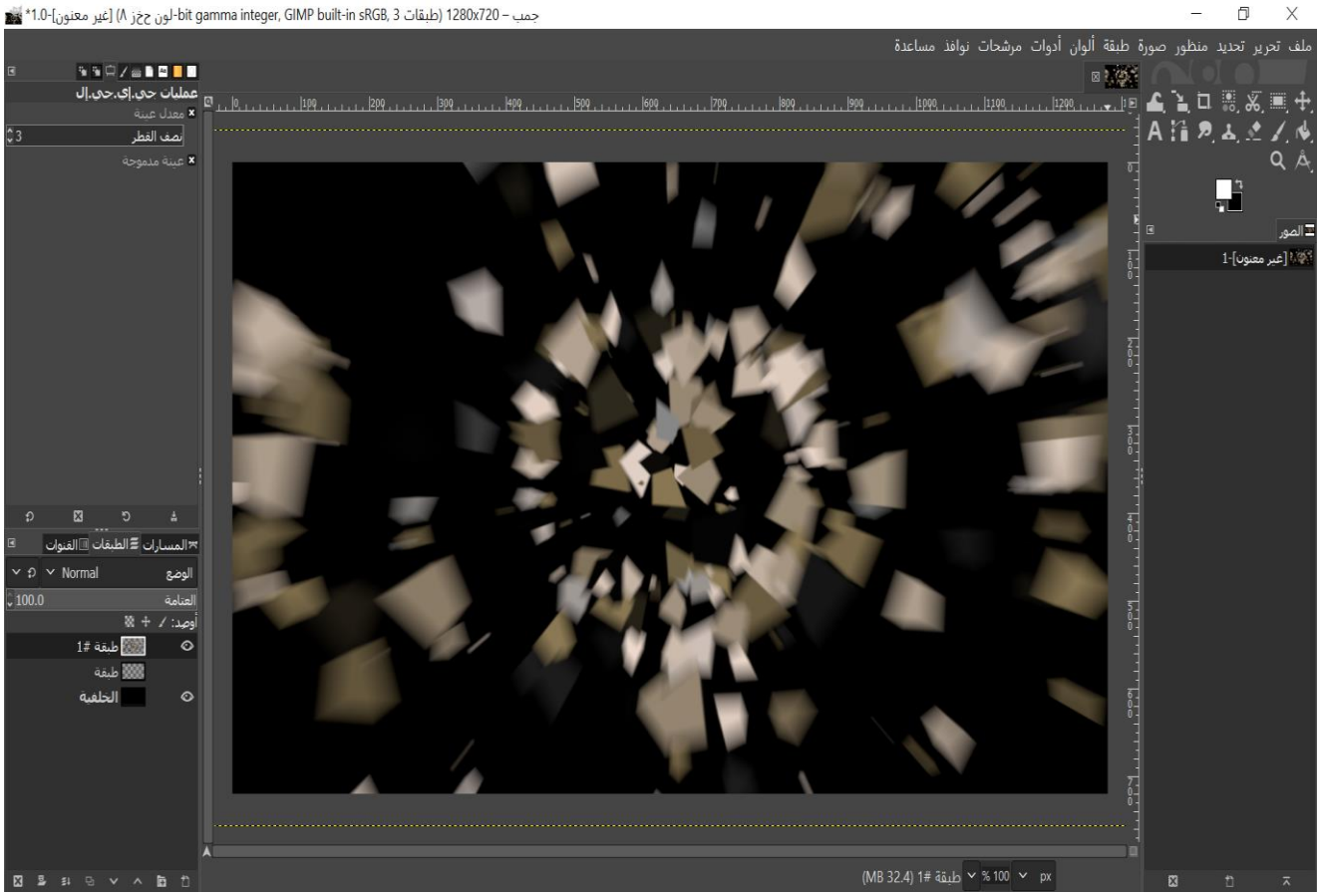
5) After applying Paint Dynamics



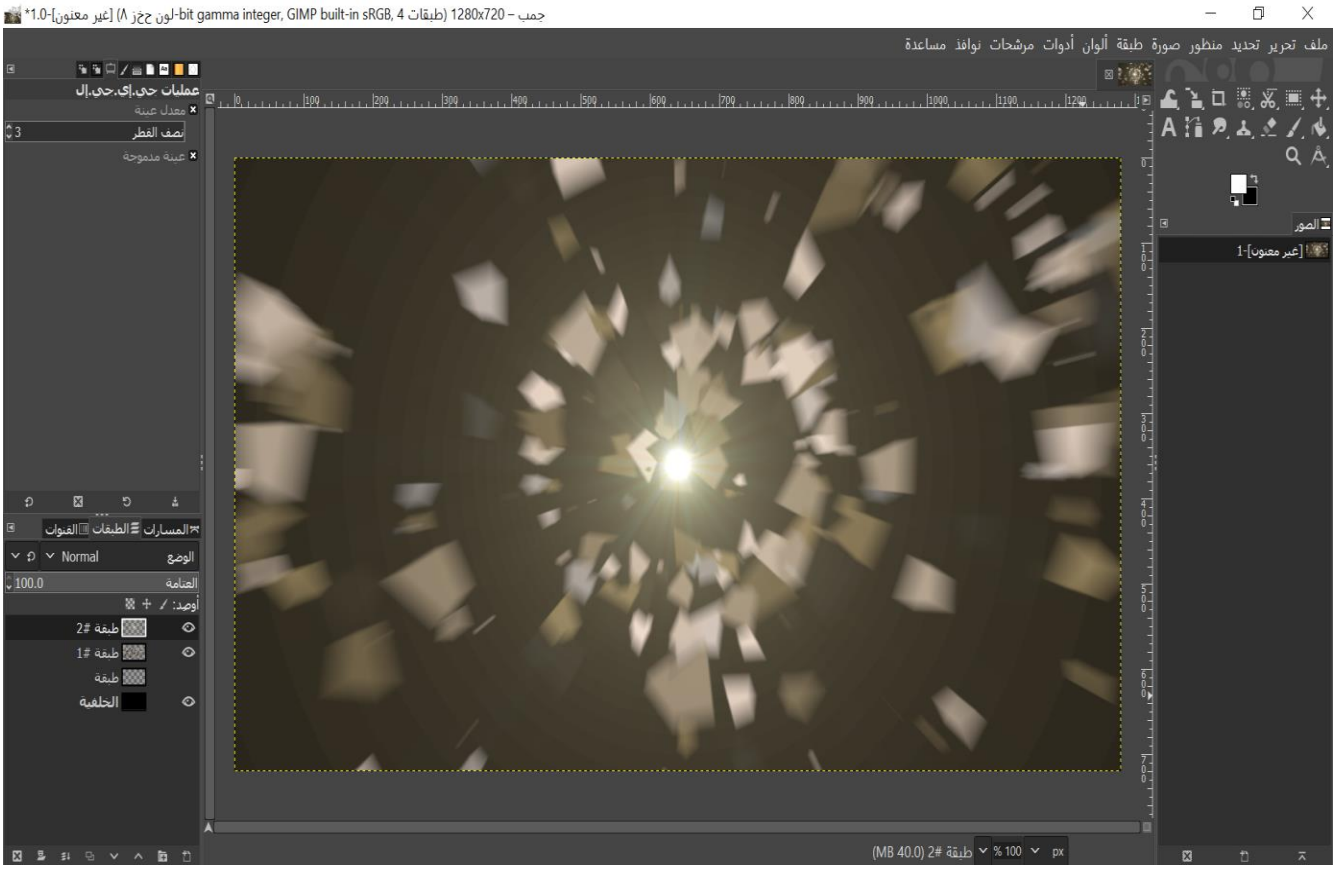
6) This result after hiding the layer and add new layer then drawing the copied shape.



7) Here, after Adding a Zoom Motion Blur filter with blurring factor of 0.1



8) After Applying supernova filter.

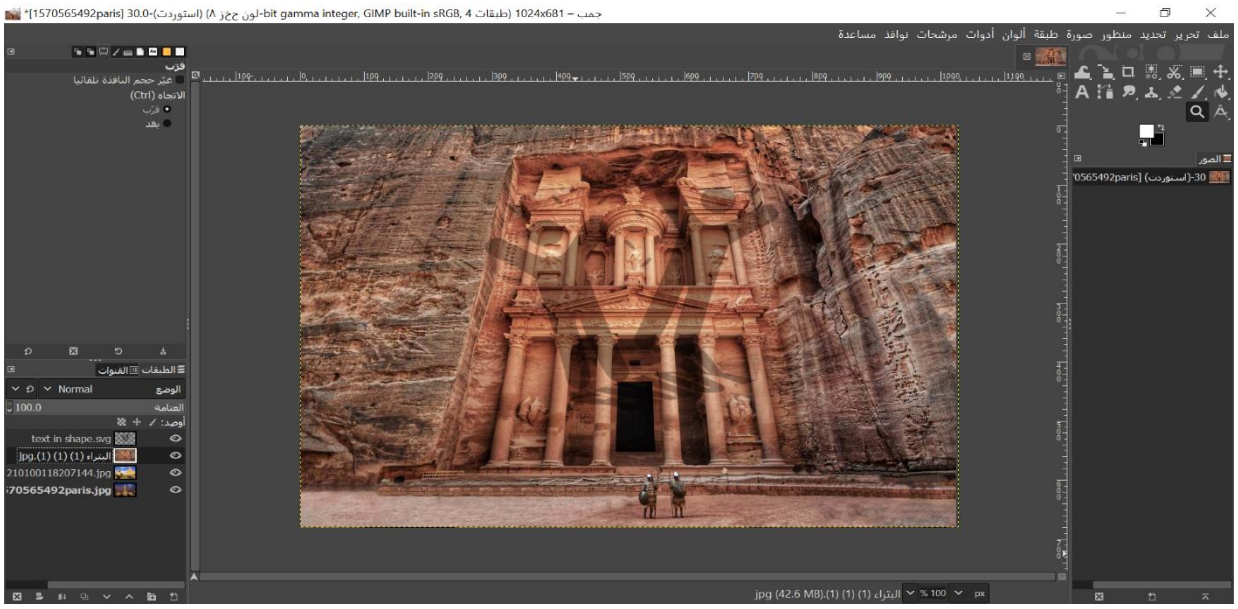


9) After Justifying the color curves in the visible layer here is the final result for explosion effect.

Q2) Create an Animated Banner of your “Favorite Tourism Place” by applying different background images and text in shapes. Create a hyperlinked text “Visit my Blog” to open this banner using HTML.

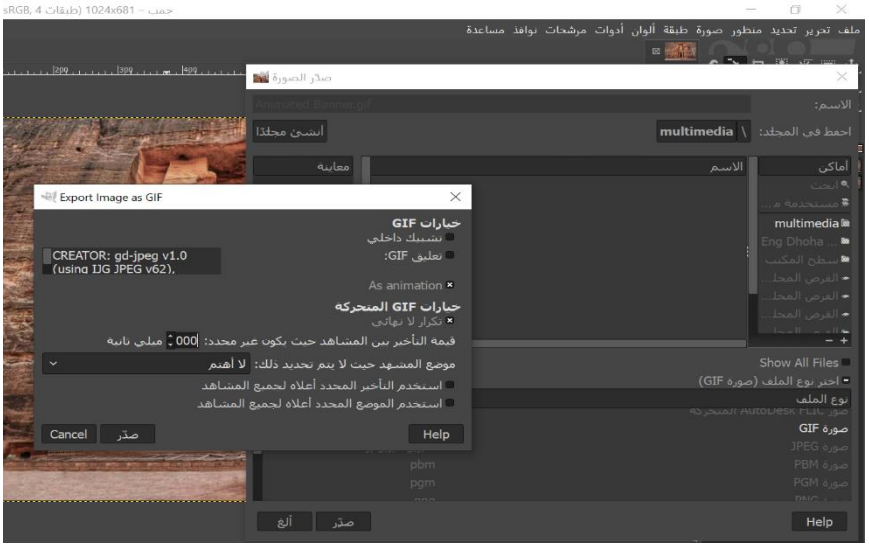
Answer

1) Open file as layers and select images and text in shapes wanted to be background and re-scale their sizes.



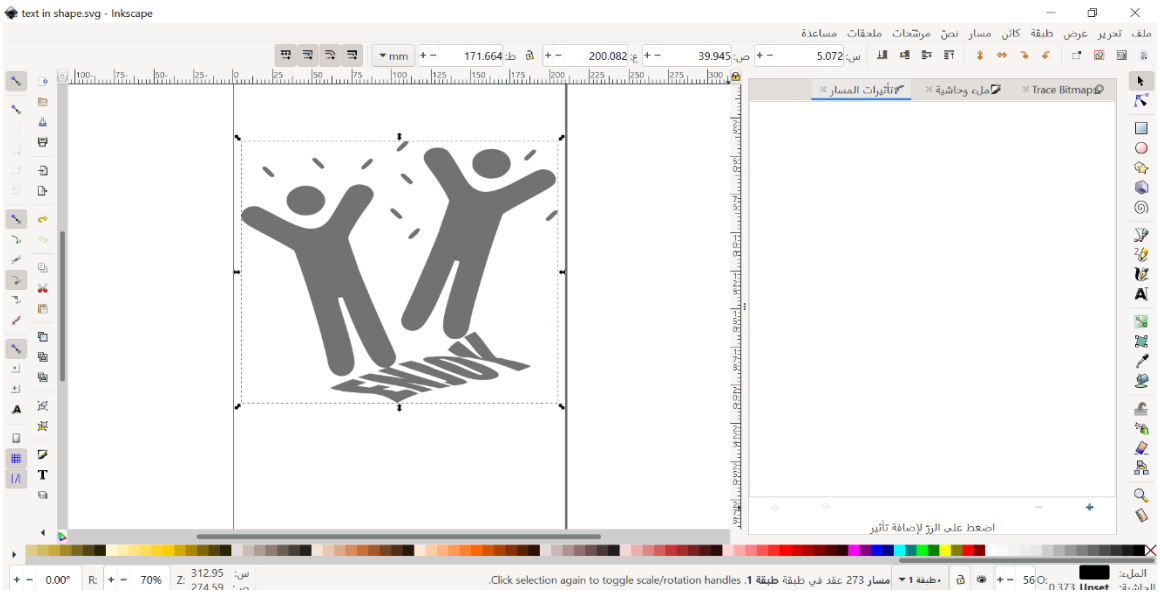
Select File -> Export , then select gif extension type then press export.

Set the animation settings.



An important issue is that Gimp doesn't natively have the capability of making texts in shape, but it could import texts in shapes from the Inkscape SVGs either as a bitmap, or as a path.

so, the text-in-shape had created in Inkscape program to set an SVG image.

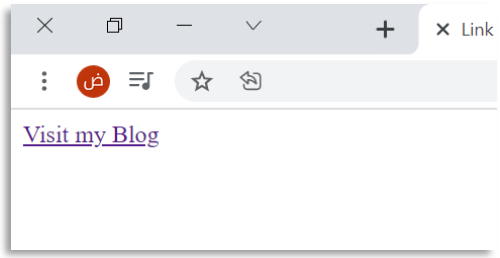


2) The codes for creating a hyperlink text to open the animated banner is shown below

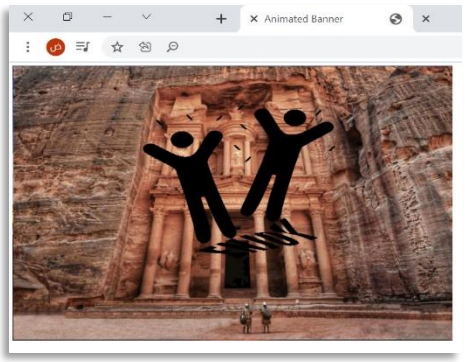
Index.html file

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Link to Animated Banner</title>
</head>
<body>
    <a href="animate.html">Visit my
Blog</a>
</body>
</html>
```

output



animate.html file

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Animated Banner</title>
</head>
<body>
    <img src="Animated Banner.gif" alt="">
</body>
</html>
```

output