

# Plotting a curve using plotly

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Write a program in R that plots the 3D surface of the following function using the `plotly` library and specifies its type.

**Description:**

The surface is defined as:

$$z = \sin\left(\sqrt{x^2 + y^2}\right) \cdot e^{-\sqrt{x^2 + y^2}}$$

The program should:

1. Plot the 3D surface of this function using `plotly`.

**Notes:**

1. The range of  $x$  and  $y$  should be defined as  $[-3, 3]$  and divided into 100 points along each axis.
2. Use the `outer` function to compute the values.

**Expected Output:**

A 3D plot of the surface created using `plotly`.

**Important Notes:**

Commenting the code is essential for presentation to students.