

```

1 def main():
2     x1 = np.linspace(-32, 32, 100000)
3     y1 = np.cos(x1)
4     grapher.plot(x1, y1, color = 'red', label = r'$y=\cos\,x$')
5     grapher.configure(axis_labels = ('$x$', '$y$', '$z$'))
6     grapher.axis_fix(axis      = 'x',
7                       symbolic = True,
8                       s        = r'\pi',
9                       v        = np.pi,
10                      first     = -2,
11                      last      = 2,
12                      step      = 1 / 4)
13     grapher.axis_fix(axis      = 'y',
14                      symbolic = False,
15                      s        = r'\pi',
16                      v        = np.pi,
17                      first     = -3,
18                      last      = 3,
19                      step      = 1)
20     grapher.fig.tight_layout(pad = 2)
21     plt.show()

```

Listing 1: Cosine

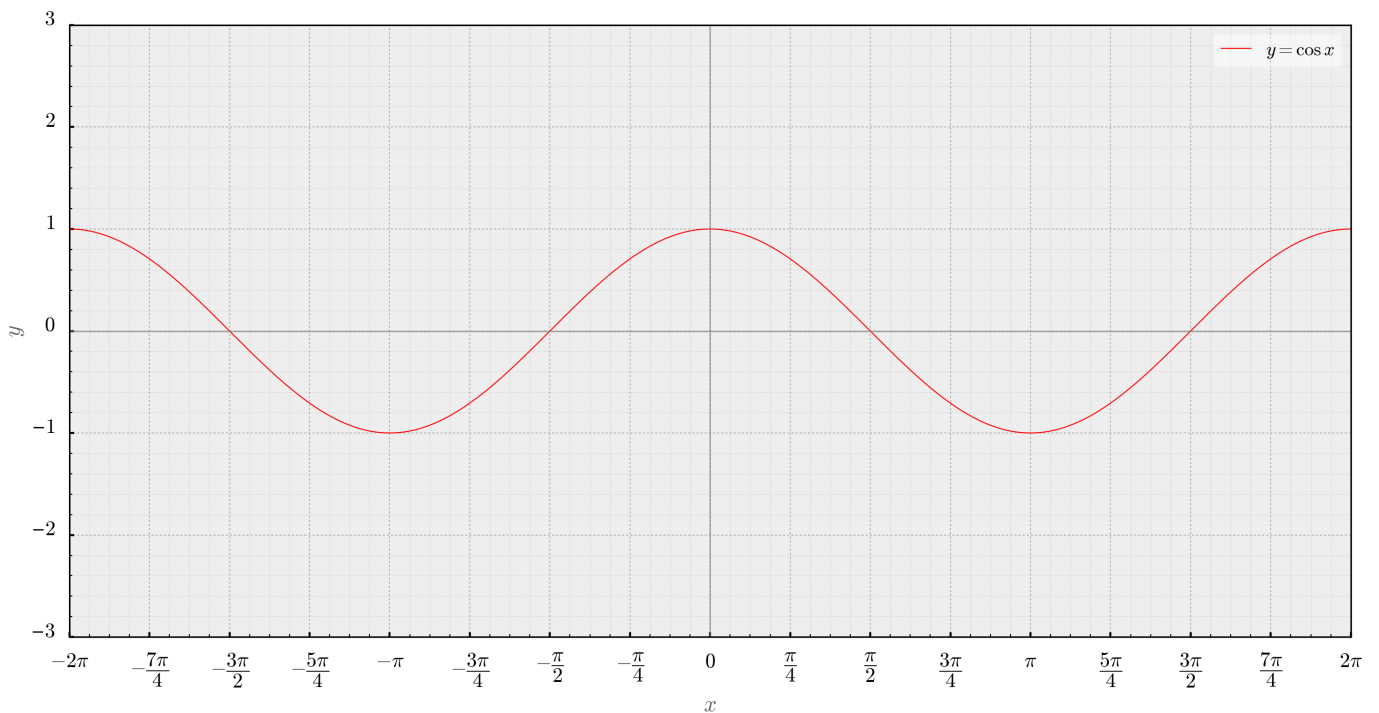


Figure 1: Cosine

```

1 def main():
2     x1 = np.linspace(-32, 32, 100000)
3     y1 = np.sqrt(x1)
4     grapher.plot(x1, y1, color = 'red', label = r'$y=\sqrt{x}$')
5     grapher.configure(axis_labels = ('$x$', '$y$', '$z$'))
6     grapher.axis_fix(axis      = 'x',
7                       symbolic = False,
8                       s        = r'\pi',
9                       v        = np.pi,
10                      first     = -2,
11                      last      = 6,
12                      step      = 1)
13     grapher.axis_fix(axis      = 'y',
14                       symbolic = False,
15                       s        = r'\pi',
16                       v        = np.pi,
17                      first     = -1,
18                      last      = 3,
19                      step      = 1)
20     grapher.fig.tight_layout(pad = 2)
21     plt.show()

```

Listing 2: Square Root

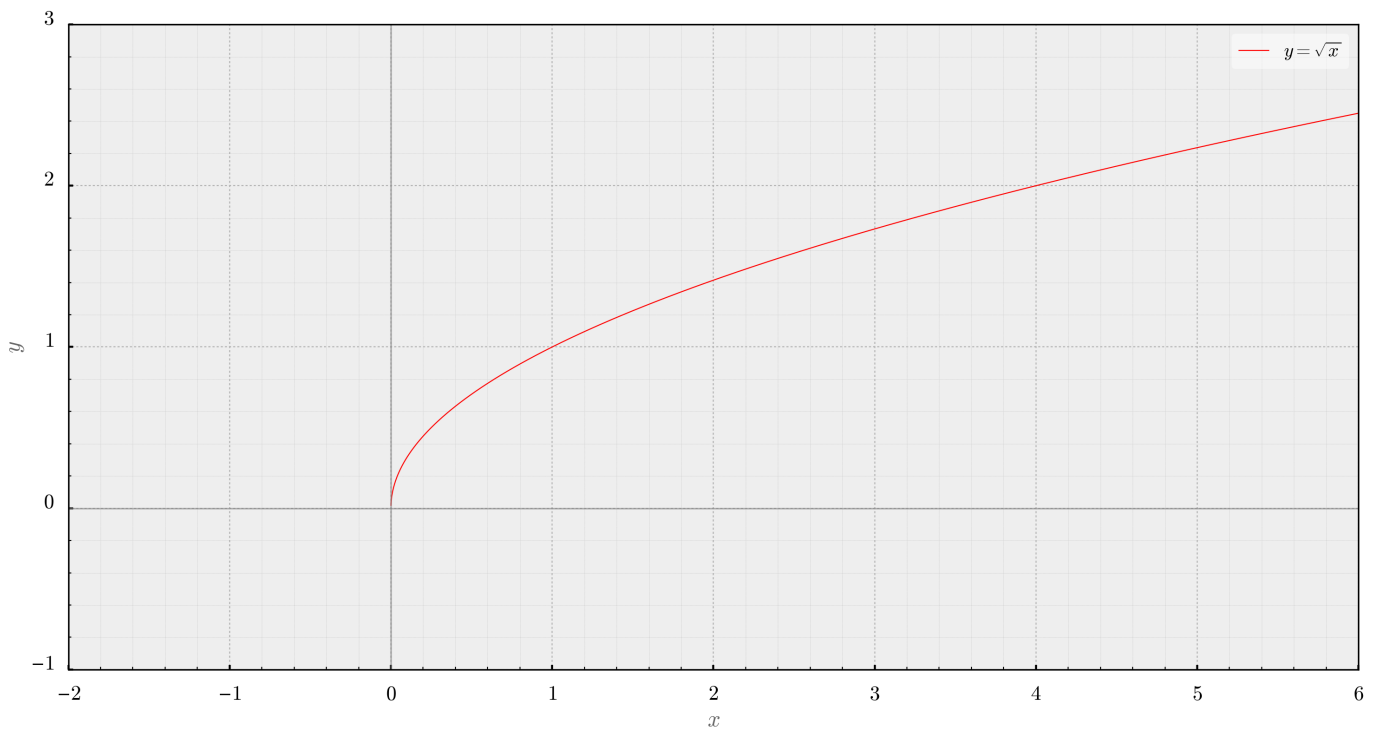


Figure 2: Square Root

You just have to change the `main` function in `'customplot.py'` as described in the above examples. Leave everything else unchanged and run the program.