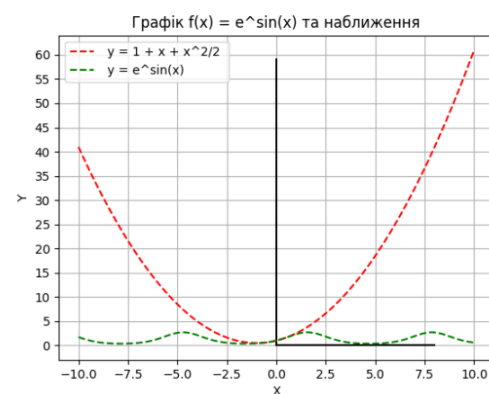


```

1 import matplotlib.pyplot as plt
2 import numpy as np
3 from numpy import *
4 import math as m
5 x = linspace(-10, 10, 100)
6 y = 1 + x + x**2/2
7 xn = linspace(-10, 10, 100)
8 t = e**sin(xn)
9 #y = e**sin(x)
10 plt.xlabel('X')
11 plt.ylabel('Y')
12 plt.grid(True)
13 plt.yticks(range(-50, 65, 5))
14
15 xx = range(1)
16 yy = range(60)
17 [plt.plot([x,x],[min(yy),max(yy)],color='k') for x in xx]
18 [plt.plot([min(xx),max(xx)],[y,y],color='k') for y in yy]
19
20 xx = range(9)
21 yy = range(1)
22 [plt.plot([x,x],[min(yy),max(yy)],color='k') for x in xx]
23 [plt.plot([min(xx),max(xx)],[y,y],color='k') for y in yy]
24
25
26 plt.plot(x, y, 'r--', label = ' y = 1 + x + x^2/2 ', color = 'r')
27 plt.plot(xn, t, 'g--', label = ' y = e^sin(x)', color = 'g')

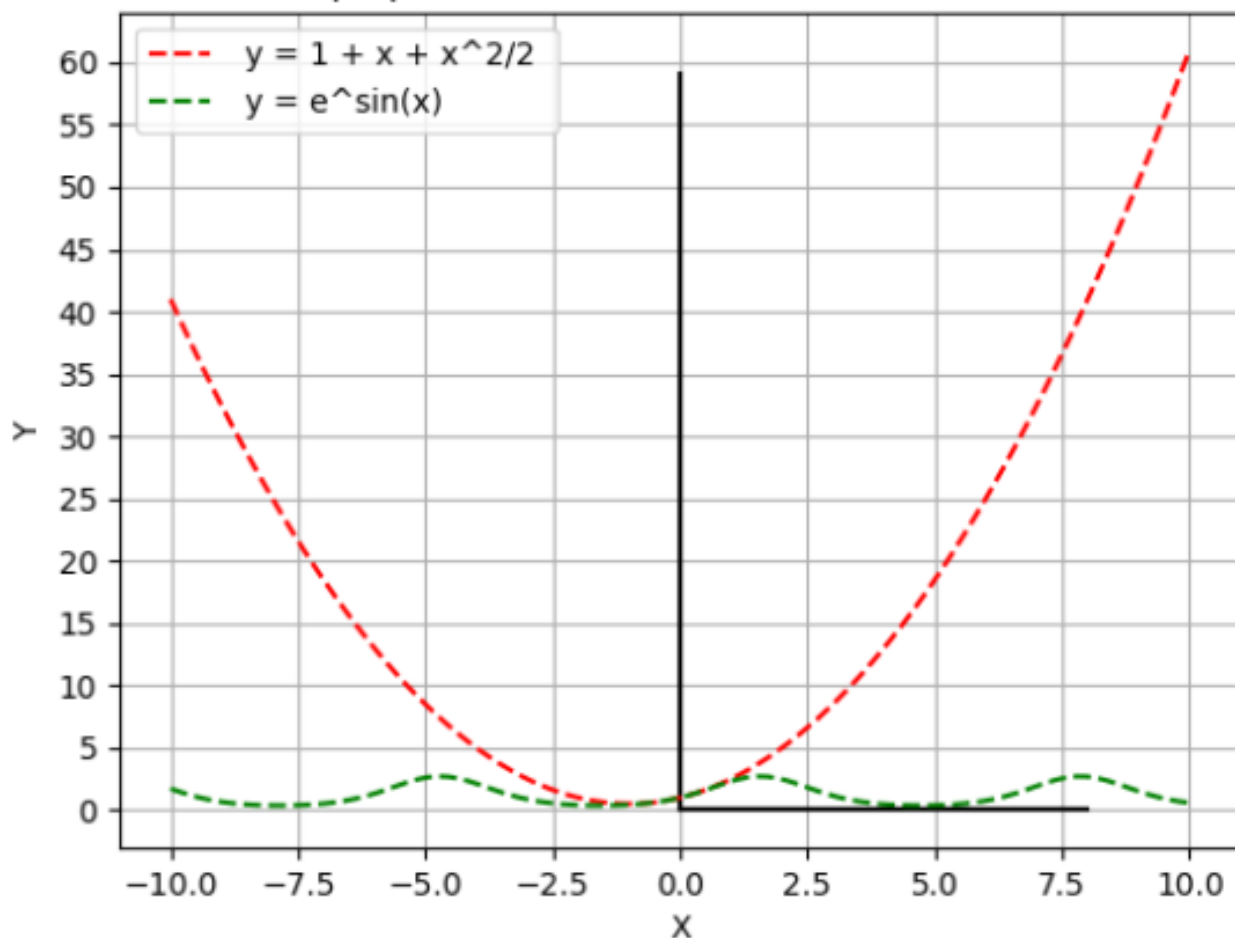
```

```
plt.plot(xn, t, 'g--', label = ' y = e^sin(x)', color = 'g')
```



plot_show.png

Графік $f(x) = e^{\sin(x)}$ та наближення



plot_show.png