

```

1  from program8_1 import func
2
3  def main():
4      print("分割数を入力してください--->", end="")
5      n = int(input())
6
7      heun( 0.0, 1.0, 0.0, 1.0, n, func)
8
9
10 # ホイン法
11 def heun(x: float, y: float, a: float, b: float, n: int, f):
12     h = (b - a) / n
13
14     for _ in range(n):
15         k1 = f(x,y)
16         k2 = f(x+h, y+h*k1)
17         y = y + h/2.0 * ( k1 + k2 )
18         x += h
19         print("x={:.6f} \t y={:.6f} ".format(x, y))
20
21
22 if __name__ == "__main__":
23     main()

```