src/Problem1.java

```java
1   /*
2   Name: Hunter Poole
3   Date: 3/5/25
4   HW #: 6
5   Problem #: 1
6   Source Code: Problem1.java
7   Action: Provides proof that a penny doubled every day for
8           thirty days would make you a millionaire.
9   */
10
11  public class Problem1
12  {
13      public static void main(String[] args)
14      {
15          double Balance = 0.01;
16
17          System.out.printf("%s %10s %n%s %13s %n%d %7s%.2f%n", "Day", "Amount",
18                              "----", "----------", 1, "$", Balance);
19
20          for (int i = 2; i <= 30; i++)
21          {
22              Balance = Balance * 2.0;
23
24              if (i < 10)
25              {
26                  System.out.printf("%d %7s%.2f %n", i, "$", Balance);
27              }
28              else
29              {
30                  System.out.printf("%d %6s%.2f %n", i, "$", Balance);
31              }
32
33          }
34      }
35  }
36
37  /*
38  Day       Amount
39  ----      ----------
40  1         $0.01
41  2         $0.02
42  3         $0.04
43  4         $0.08
44  5         $0.16
45  6         $0.32
46  7         $0.64
47  8         $1.28
```

```
48   9         $2.56
49   10        $5.12
50   11        $10.24
51   12        $20.48
52   13        $40.96
53   14        $81.92
54   15        $163.84
55   16        $327.68
56   17        $655.36
57   18        $1310.72
58   19        $2621.44
59   20        $5242.88
60   21        $10485.76
61   22        $20971.52
62   23        $41943.04
63   24        $83886.08
64   25        $167772.16
65   26        $335544.32
66   27        $671088.64
67   28        $1342177.28
68   29        $2684354.56
69   30        $5368709.12
70    */
71
```