

Solutions – For loops

Problem 1:

We have to add interest to the debt at the end of the month and then deduct the payment. Redundantly, we also print out the outstanding debt:

```
debt = 50000
for month in range(1,16):
    debt += round(0.1/100*debt,2)
    debt -= 2000
    print('month', month, ':', debt)
print(debt)
```

Problem 2:

```
import turtle

t = turtle.Turtle()
t.speed(9)

for length in range(50):
    for j in range(5):          #drawing the pentagon
        t.forward(100+5*length)
        t.left(360/5)
    t.penup()                  #move to the next pentagon
    t.backward(3)
    t.right(90)
    t.forward(3)
    t.left(90)
    t.pendown()
```