**Lab Assignment #5**

**Looping**

**CSCI 1380**

**Dr. Abraham**

**Due Feb 28, 2014**

**Write a program to print an amortization schedule. Amortization schedule will be explained in class. Input required: Principle borrowed, interest rate per annum, Monthly payment, starting year of the loan and month of first payment. Interest for each month will be calculated and principle paid for each month is calculated deducting the interest from the monthly payment. The calculation will continue until the principle remaining is less than the monthly payment.**

**Here is an example of a run.**

This program will print an Amortization schedule

given amount of loan and monthly payment.

Please enter amount borrowed: 40000

Interest rate: 5

Monthly Payment Amount: 550.00

Enter Year loan initiated: 2014

Enter month of first payment as int: 3

AMORTIZATION SCHEDULE

Month Beg Bal Payment Interest Principle Ending Bal

----------------------------------------------------------------------------

3 40000.00 550.00 166.67 383.33 39616.67

4 39616.67 550.00 165.07 384.93 39231.74

5 39231.74 550.00 163.47 386.53 38845.20

6 38845.20 550.00 161.86 388.14 38457.06

7 38457.06 550.00 160.24 389.76 38067.29

8 38067.29 550.00 158.61 391.39 37675.91

9 37675.91 550.00 156.98 393.02 37282.89

10 37282.89 550.00 155.35 394.65 36888.24

11 36888.24 550.00 153.70 396.30 36491.94

12 36491.94 550.00 152.05 397.95 36093.99

----------------------------------------------------------------------------

Year: 2014 5500.00 1593.99 3906.01

============================================================================

Month Beg Bal Payment Interest Principle Ending Bal

----------------------------------------------------------------------------

1 36093.99 550.00 150.39 399.61 35694.38

2 35694.38 550.00 148.73 401.27 35293.11

3 35293.11 550.00 147.05 402.95 34890.16

4 34890.16 550.00 145.38 404.62 34485.54

5 34485.54 550.00 143.69 406.31 34079.23

6 34079.23 550.00 142.00 408.00 33671.22

7 33671.22 550.00 140.30 409.70 33261.52

8 33261.52 550.00 138.59 411.41 32850.11

9 32850.11 550.00 136.88 413.12 32436.98

10 32436.98 550.00 135.15 414.85 32022.14

11 32022.14 550.00 133.43 416.57 31605.56

12 31605.56 550.00 131.69 418.31 31187.25

----------------------------------------------------------------------------

Year: 2015 6600.00 1693.27 4906.73

============================================================================

Month Beg Bal Payment Interest Principle Ending Bal

----------------------------------------------------------------------------

1 31187.25 550.00 129.95 420.05 30767.20

2 30767.20 550.00 128.20 421.80 30345.40

3 30345.40 550.00 126.44 423.56 29921.84

4 29921.84 550.00 124.67 425.33 29496.51

5 29496.51 550.00 122.90 427.10 29069.41

6 29069.41 550.00 121.12 428.88 28640.54

7 28640.54 550.00 119.34 430.66 28209.87

8 28209.87 550.00 117.54 432.46 27777.41

9 27777.41 550.00 115.74 434.26 27343.15

10 27343.15 550.00 113.93 436.07 26907.08

11 26907.08 550.00 112.11 437.89 26469.19

12 26469.19 550.00 110.29 439.71 26029.48

----------------------------------------------------------------------------

Year: 2016 6600.00 1442.23 5157.77

============================================================================

Month Beg Bal Payment Interest Principle Ending Bal

----------------------------------------------------------------------------

1 26029.48 550.00 108.46 441.54 25587.94

2 25587.94 550.00 106.62 443.38 25144.55

3 25144.55 550.00 104.77 445.23 24699.32

4 24699.32 550.00 102.91 447.09 24252.24

5 24252.24 550.00 101.05 448.95 23803.29

6 23803.29 550.00 99.18 450.82 23352.47

7 23352.47 550.00 97.30 452.70 22899.77

8 22899.77 550.00 95.42 454.58 22445.19

9 22445.19 550.00 93.52 456.48 21988.71

10 21988.71 550.00 91.62 458.38 21530.33

11 21530.33 550.00 89.71 460.29 21070.04

12 21070.04 550.00 87.79 462.21 20607.83

----------------------------------------------------------------------------

Year: 2017 6600.00 1178.35 5421.65

============================================================================

Month Beg Bal Payment Interest Principle Ending Bal

----------------------------------------------------------------------------

1 20607.83 550.00 85.87 464.13 20143.70

2 20143.70 550.00 83.93 466.07 19677.63

3 19677.63 550.00 81.99 468.01 19209.62

4 19209.62 550.00 80.04 469.96 18739.66

5 18739.66 550.00 78.08 471.92 18267.74

6 18267.74 550.00 76.12 473.88 17793.86

7 17793.86 550.00 74.14 475.86 17318.00

8 17318.00 550.00 72.16 477.84 16840.15

9 16840.15 550.00 70.17 479.83 16360.32

10 16360.32 550.00 68.17 481.83 15878.49

11 15878.49 550.00 66.16 483.84 15394.65

12 15394.65 550.00 64.14 485.86 14908.79

----------------------------------------------------------------------------

Year: 2018 6600.00 900.97 5699.03

============================================================================

Month Beg Bal Payment Interest Principle Ending Bal

----------------------------------------------------------------------------

1 14908.79 550.00 62.12 487.88 14420.91

2 14420.91 550.00 60.09 489.91 13931.00

3 13931.00 550.00 58.05 491.95 13439.05

4 13439.05 550.00 56.00 494.00 12945.04

5 12945.04 550.00 53.94 496.06 12448.98

6 12448.98 550.00 51.87 498.13 11950.85

7 11950.85 550.00 49.80 500.20 11450.65

8 11450.65 550.00 47.71 502.29 10948.36

9 10948.36 550.00 45.62 504.38 10443.98

10 10443.98 550.00 43.52 506.48 9937.49

11 9937.49 550.00 41.41 508.59 9428.90

12 9428.90 550.00 39.29 510.71 8918.19

----------------------------------------------------------------------------

Year: 2019 6600.00 609.39 5990.61

============================================================================

Month Beg Bal Payment Interest Principle Ending Bal

----------------------------------------------------------------------------

1 8918.19 550.00 37.16 512.84 8405.35

2 8405.35 550.00 35.02 514.98 7890.37

3 7890.37 550.00 32.88 517.12 7373.24

4 7373.24 550.00 30.72 519.28 6853.97

5 6853.97 550.00 28.56 521.44 6332.52

6 6332.52 550.00 26.39 523.61 5808.91

7 5808.91 550.00 24.20 525.80 5283.11

8 5283.11 550.00 22.01 527.99 4755.13

9 4755.13 550.00 19.81 530.19 4224.94

10 4224.94 550.00 17.60 532.40 3692.54

11 3692.54 550.00 15.39 534.61 3157.93

12 3157.93 550.00 13.16 536.84 2621.09

----------------------------------------------------------------------------

Year: 2020 6600.00 302.90 6297.10

============================================================================

Month Beg Bal Payment Interest Principle Ending Bal

----------------------------------------------------------------------------

1 2621.09 550.00 10.92 539.08 2082.01

2 2082.01 550.00 8.68 541.32 1540.68

3 1540.68 550.00 6.42 543.58 997.10

4 997.10 550.00 4.15 545.85 451.26

5 451.26 Last Payment