

AP Computer Science

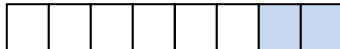


mr Hanley

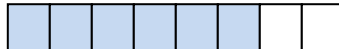


Assignment 3/11₂/3₈/3₁₆

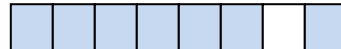
Binary



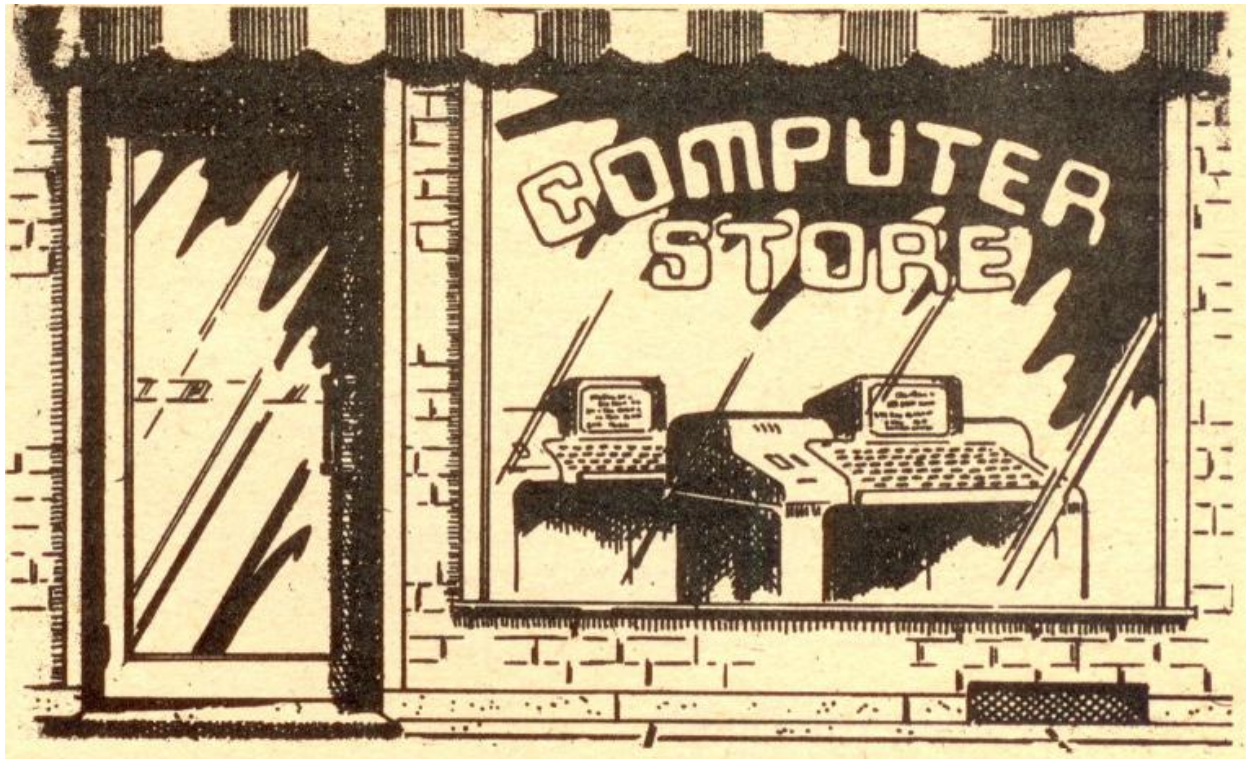
Ones Comp



Twos Comp



Tidbit Computer Store



Design a program to display the payment plan for a computer purchase

At the tidbit computer store, a purchaser puts 10% down and then pays 5% of the remaining amount per month until the last month when they pay off any remaining balance.

Allow the user to input the computer cost and the annual interest rate and output a table of payments as follows;

* Dynamic Memory * Big O Notation * Stacks * Extreme Programming * Selection Sort * Insertion Sort * Waterfall Model

String * Arrays * ArrayList * Client Server * Artificial Intelligence * Inheritance * Files * Video Games * Short circuit evaluation *

Month number (beginning with 1)

Current total balance owed

Interest owed for that month

Amount of principal owed for that month

Payment for that month

Balance remaining after payment

The amount of interest for a month is equal to $\text{balance} * \text{rate} / 12$. The amount of principal for a month is equal to the monthly payment minus the interest owed.

Round off each calculation to the nearest penny. Use the DecimalFormat to print out each value to the nearest cent.

Please enter in a computer amount->2000

Please enter in annual rate->12

Down payment = \$200

Payment Schedule

Month	Balance Start	Interest	Principal	Payment	Balance End
1	1,800.00	18.00	72.00	90.00	1,728.00
2	1,728.00	17.28	72.72	90.00	1,655.28
3	1,655.28	16.55	73.45	90.00	1,581.83
4	1,581.83	15.82	74.18	90.00	1,507.65
5	1,507.65	15.08	74.92	90.00	1,432.73
6	1,432.73	14.33	75.67	90.00	1,357.06
7	1,357.06	13.57	76.43	90.00	1,280.63
8	1,280.63	12.81	77.19	90.00	1,203.44
9	1,203.44	12.03	77.97	90.00	1,125.47
10	1,125.47	11.25	78.75	90.00	1,046.72
11	1,046.72	10.47	79.53	90.00	967.19
12	967.19	09.67	80.33	90.00	886.86
13	886.86	08.87	81.13	90.00	805.73
14	805.73	08.06	81.94	90.00	723.79
15	723.79	07.24	82.76	90.00	641.03
16	641.03	06.41	83.59	90.00	557.44
17	557.44	05.57	84.43	90.00	473.01
18	473.01	04.73	85.27	90.00	387.74
19	387.74	03.88	86.12	90.00	301.62
20	301.62	03.02	86.98	90.00	214.64
21	214.64	02.15	87.85	90.00	126.79
22	126.79	01.27	88.73	90.00	38.06
23	38.06	00.38	38.06	38.44	00.00

Project Name	Assign 3 – Tidbit Computer Store
Class 1 Name	TomHurzy
Class 2 Name	MethodPractice
Class 3 Name	MusicDisc (contents listed above)

Rubric	
Calculates correctly	70
Formatted using tabs and DecimalFormatter	20
Comments	10
TOTAL	100

Recursion*Linear Search*Binary Search*Grid World Case Study*File Processing *nlogn*Hangman