

Assignment 4

Q1

```
Initializing two test accounts...
First account: Balance = $ 5000.00, Annual Rate = 0.05
Second account: Balance = $ 2500.00, Annual Rate = 0.05

Calculating first month's interest...
First account: Balance = $ 5020.83, Annual Rate = 0.05
Second account: Balance = $ 2510.42, Annual Rate = 0.05

Modifying the interest rate...
Calculating the second month's interest...
First account: Balance = $ 5050.12, Annual Rate = 0.07
Second account: Balance = $ 2525.06, Annual Rate = 0.07

Withdrawing $2500 from account 1...
First account: Balance = $ 2550.12

Attempting to withdraw account 2 below $100 minimum...
ERROR: Performing transaction would bring balance below $100 minimum!
Your account will be closed, and the balance
will be sent as a check to mailing address on file.

Exiting demo program...
```

Q2

I have a number between 1 and 2000. Can you guess my number?

Enter your first guess Too Low

I have a number between 1 and 2000. Can you guess my number?

Enter your first guess 2000

Guess

Retry

Too High

I have a number between 1 and 2000. Can you guess my number?

Enter your first guess 599

Guess

Retry

Too High

I have a number between 1 and 2000. Can you guess my number?

Enter your first guess 595

Guess

Retry

Correct

Q3

ERROR: Cannot divide by 0!

Standard

7	8	9	/
4	5	6	*
1	2	3	-
0	.	=	+

2.0 / 1.0 = 2.0

Standard

7	8	9	/
4	5	6	*
1	2	3	-
0	.	=	+

2.0 * 0.0 = 0.0

Standard

7	8	9	/
4	5	6	*
1	2	3	-
0	.	=	+

42.0 - 40.0 = 2.0

Standard

7	8	9	/
4	5	6	*
1	2	3	-
0	.	=	+

40.0 + 2.0 = 42.0

Standard

7	8	9	/
4	5	6	*
1	2	3	-
0	.	=	+

Q4

```
Richard Davis's Space Company
Enter the profit for month 1 ->200.00
Enter the profit for month 2 ->300.00
Enter the profit for month 3 ->80.00
Enter the profit for month 4 ->800.00
Enter the profit for month 5 ->23.50
Enter the profit for month 6 ->12.50
Enter the profit for month 7 ->34.55
Enter the profit for month 8 ->900.00
Enter the profit for month 9 ->150.00
Enter the profit for month 10 ->75.40
Enter the profit for month 11 ->90.00
Enter the profit for month 12 ->1200.00
The total profit for the year: $ 3865.95
The average monthly profit:    $ 322.16
Month with highest profit:      Month 12
Month with lowest profit:       Month 6
```

```
Richard Davis's Space Company
Enter the profit for month 1 ->-11
ERROR: profit cannot be negative. Reenter.
Enter the profit for month 1 ->12
Enter the profit for month 2 ->1
Enter the profit for month 3 ->23
Enter the profit for month 4 ->44
Enter the profit for month 5 ->33
Enter the profit for month 6 ->234
Enter the profit for month 7 ->90
Enter the profit for month 8 ->23
Enter the profit for month 9 ->89
Enter the profit for month 10 ->900
Enter the profit for month 11 ->100
Enter the profit for month 12 ->20
The total profit for the year: $ 1569.00
The average monthly profit:    $ 130.75
Month with highest profit:      Month 10
Month with lowest profit:       Month 2
```