



## Savings Account Balance

Write a program that calculates the balance of a savings account at the end of a three-month period. It should ask the user for the starting balance and the annual interest rate. A loop should then iterate once for every month in the period, performing the following steps:

- A) Ask the user for the total amount deposited into the account during that month and add it to the balance. Do not accept negative numbers.
- B) Ask the user for the total amount withdrawn from the account during that month and subtract it from the balance. Do not accept negative numbers or numbers greater than the balance after the deposits for the month have been added in.
- C) Calculate the interest for that month. The monthly interest rate is the annual interest rate divided by 12. Multiply the monthly interest rate by the average of that month's starting and ending balance to get the interest amount for the month. This amount should be added to the balance.

After the last iteration, the program should display a report that includes the following information:

- starting balance at the beginning of the three-month period
- total deposits made during the three months
- total withdrawals made during the three months
- total interest posted to the account during the three months
- final balance

/\* SAMPLE RUN RESULTS

```
Enter the starting balance on the account: $1000
Enter the annual interest rate on the account (e.g. .04): .015
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```
Month 1
Total deposits for this month:    $300
Total withdrawals for this month: $0
Interest received this month $1.44
Ending monthly balance $1301.44
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```
Month 2
Total deposits for this month:    $250
Total withdrawals for this month: $100
Interest received this month $1.72
Ending monthly balance $1453.16
```

```
Month 3
Total deposits for this month:    $300
Total withdrawals for this month: $0
Interest received this month $2.00
Ending monthly balance $1755.16
```

# Quarterly Savings Account Statement

Starting balance:	\$	1000.00
Total deposits:	+ \$	850.00
Total withdrawals:	- \$	100.00
Total interest:	+ \$	5.16

Ending balance:	\$	<u>1755.16</u>
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