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**Test ID Number**
**3 DBI Finding Forrester**


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**Student ID Num**

Write a perl/mysql program to examine the BOOKS table and find each row that includes the string "Forrester" anywhere on the row. Print all columns of the matching rows. You do not know how many columns exist or what they are called.

The "In-Class Test Rules" provided herewith apply to this exam. Use the Test ID Number shown above to identify each of your answer sheets. Write your seven-digit BYUH Student ID number in the blank above, and turn in this sheet along with your answer sheets. It will be kept separate until grading is completed, and will then be used to assign your score to the proper person.

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**Leave the space below empty.** It will be used for calculating your exam score, reporting your grade, and other notes (if any) from the instructor.

DO NOT WRITE YOUR STUDENT ID NUMBER OR NAME ON ANY OTHER TEST SHEET.

Each problem is worth 20 points, up to a maximum of 40 points for the whole test.

## 1 Selective Statistics

Read lines from STDIN until you get a blank line. On each line is a number (e.g., -13 or 98.6). Use only the numbers between 100 and 1000. Ignore the rest. Report (a) how many numbers were in range, (b) what is their total, (c) what is their average, (d) what is their largest (maximum) number, (e) what is their smallest (minimum) number. Do not use any kind of array. Use a small, constant amount of storage. Assume there will be at least one usable number, but it may not be first.

## 2 Chuck-A-Luck

Ask the player for a number. Read it in. Use something like `$x=int(rand(6))+1` to "roll" three six-sided dice by generating three random integers between 1 and 6. If all three dice match the user's number, print "You win three dollars." If only two dice match, print "You win two dollars." If only one die matches, print "You win one dollar." If none match, print "You lose one dollar."

The actual grades were as follows:

grade	range	scores
A	40-38	40, 40, 40, 40, 40, 40, 39, 39, 39, 38
A-	37-36	37
B+	35	none
B	34	none
B-	33-32	33, 32
C+	31	none
C	30-28	30, 30, 30, 28
C-	27-25	27, 25
D+	24-22	24, 24, 24, 23, 22, 22
D	21-18	20, 20, 19, 18, 18
D-	17-15	17, 17, 17, 16, 15
F	14-0	14, 13, 13, 13, 12, 12, 12, 10, 9, 9, 7