

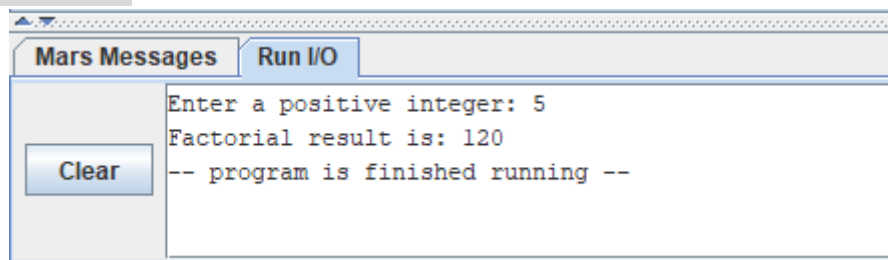
Lab06: Integer Multiplication and Division

Note: You need to follow the printing style in the sample runs.

Task(s):

1. Factorial Calculation: Using the **mul** instruction, write a MIPS program that **computes** the factorial of a number **n** input by the user, and **display** the result on the screen. **Run** your code and **record** the maximum 32-bit factorial value that can be computed without errors.

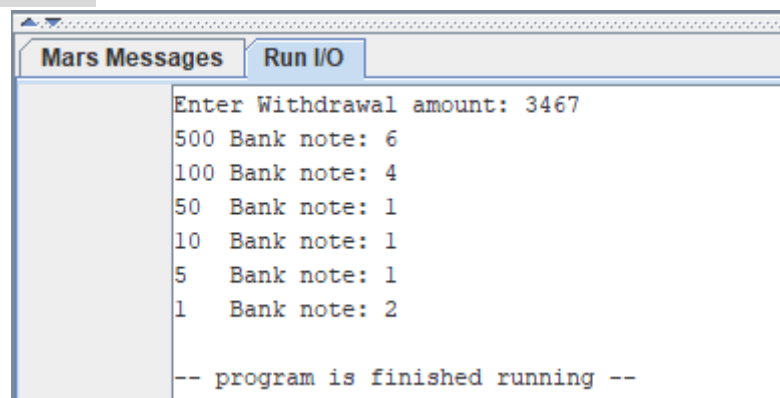
SAMPLE RUN:



```
Mars Messages  Run I/O
Enter a positive integer: 5
Factorial result is: 120
-- program is finished running --
```

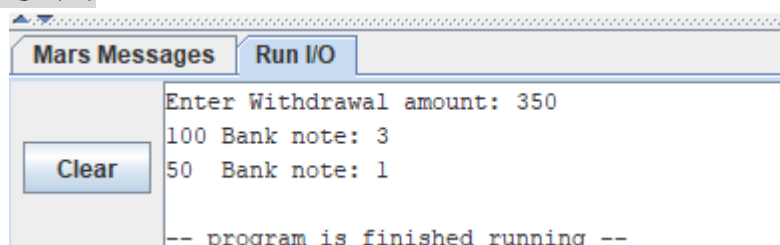
2. Write a MIPS assembly program that **asks** the user about the total amount of money he wishes to withdraw from the ATM. Then, **calculate** the minimum number of bank notes (500, 100, 50, 10, 5, 1) required for his withdrawal. Finally, **print** out the count of each banknote required. If a bank note is not required (i.e., its count is zero), do not print it out.

SAMPLE RUN1:



```
Mars Messages  Run I/O
Enter Withdrawal amount: 3467
500 Bank note: 6
100 Bank note: 4
50 Bank note: 1
10 Bank note: 1
5 Bank note: 1
1 Bank note: 2
-- program is finished running --
```

SAMPLE RUN2:



```
Mars Messages  Run I/O
Enter Withdrawal amount: 350
100 Bank note: 3
50 Bank note: 1
-- program is finished running --
```