

### Lab Assignment 3 : Abstract Data Types - Stack

**Q1.** Write a program to use a stack to read an integer and print its prime divisors in ascending order

**Q2. Parenthesis matching :**

Write a program to examine whether the pairs of parenthesis “(“, “)”, “[“, “]”, “{“, “}” in an expression string are correct in order

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*Input : expression “ O{([[])]}”*

*Output : Balanced*

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*Input : expression “ O([[])]}”*

*Output : Un-Balanced*

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**Q3.** You need to implement an Polish Notation calculator that will read in an Polish Notation expression from a file (specified as a command line argument) and print out (to stdout ) the result of performing the computation. No other output is required.