



Stacks & Queues

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Stack _ LIFO

Operators on Stack :

- Create(Stack)
- Empty(Stack)
- Pop(Stack, Item)
- Push(Stack, Item)

Queue _ FIFO

Operators on Queue:

- Create(Queue)
- EmptyQueue)
- Add(Queue, Item)
- Remove(Queue, Item)

1. Use Stack to transform a number from base in N to base in M

2. Write a function that solves the Onion problem.

Ex: Onion("()hello)((hehe)())") => #True

 Onion("(((good)))") => #False

3. Write a program that finds prime factors of a positive integer. Show the prime factors to the screen in descending order.

4. Write a program that finds the path in a maze.

5. * Write a program that transform an expression from infix notation into prefix notation or postfix notation and vice versa.

6. *Write a program that calculates the value of an expression passed in.

7. Use queue to check if a number passed in is palindrome or not.