

Task 4: Evaluating Postfix Expressions  
 $ab*ca-/de*+$  where  $a=2$ ,  $b=3$ ,  $c=4$ ,  $d=5$ ,  $e=6$

Next char	Operation	Stack
a	Push 2	[ 2 ]
b	Push 3	[ 2 3 ]
*	Pop 3	[ 2 ]
	Pop 2	[ ]
	Push $3 * 2$	[ 6 ]
c	Push 4	[ 6 4 ]
a	Push 2	[ 6 4 2 ]
-	Pop 2	[ 6 4 ]
	Pop 4	[ 6 ]
	Push $4 - 2$	[ 6 2 ]
/	Pop 2	[ 6 ]
	Pop 6	[ ]
	Push $6 / 2$	[ 3 ]
d	Push 5	[ 3 5 ]
e	Push 6	[ 3 5 6 ]
*	Pop 6	[ 3 5 ]
	Pop 5	[ 3 ]
	Push $5 * 6$	[ 3 30 ]
+	Pop 30	[ 3 ]
	Pop 3	[ ]
	Push $3 + 30$	[ 33 ]