

PEEK OPERATION

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- Peek operation requires the user to give a position to peek at as well. Here, position refers to the distance of the current index from the top element + 1.

0	1	2	3	4	5
7	8	12			

↑
Top

		Position	Index
2	12	1	2
1	8	2	1
0	7	3	0

STACK

- The index, mathematically, is $(Top - Position + 1)$.

So, before we return the element at the asked position, we'll check if the

position asked is valid for the current ~~task~~ stack. Index 0, 1 & 2 are valid for the stack illustrated above, but index 4 or 5 or any other negative index is invalid.

NOTE: PEEK(1) returning 12 here.

CODE :

```

INT PEEK (STRUCT STACK *PTR, INT I)
{
    INT ARRAYIND = PTR->TOP - I + 1;
    IF (ARRAYIND < 0)
    {
        PRINTF ("NOT A VALID POSITION");
        RETURN -1;
    }
    ELSE
    {
        RETURN PTR->ARR[ARRAYIND];
    }
}

```