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COURSE NAME:DECODE DSA WITH C++

BATCH:DECODE 2.0

MODULE NAME:STACK PART 1

MOBILE NUMBER:8434283953

QUESTION1:

1. You have two stack and 1,2,3,4,5 values and you have pushed all these values to S1 (in the order 1,2,3,4,5) and then you took 2 elements from top and inserted into S2 , then pop 1 element from S1 and then take top of S2 and insert into S1. What is the second top element in S1.
1. [3]
 2. [2]
 3. [1]
 4. [5]

Answer:

Option 2 : [2]

Question:2

2. Remove kth element from top in a given stack.
- Hint : Use another stack, just like insertion question.*

Answer:

```
#include<bits/stdc++.h>
using namespace std;
void removeKthElement(int k , stack<int>&st){
    stack<int>st2;
    k--;
    while(k--){
        st2.push(st.top());
        st.pop();
    }
    st.pop();
    while(!st2.empty()){
        st.push(st2.top());
    }
}
```

```

    st2.pop();
}
}
int main(){
    stack<int>st;
    st.push(1);
    st.push(2);
    st.push(3);
    st.push(4);
    st.push(5);
    removeKthElement(3 , st)
}

```

Question:3

3. What does this function do ?

```

void fun(int n){
    stack<int> s;
    while (n > 0){
        s.push(n%2);
        n = n/2;
    }
    while (!s.empty()){
        cout<<s.top();
        s.pop();
    }
}

```

1. Prints binary representation of n in reverse order
2. Prints binary representation of n
3. Print the value of Log n
4. Print the value of Log n in reverse order

Answer:

option 1 and 2.