```cpp
// Question_5.cpp : This file contains the 'main' function. Program execution begins and ends there.
//
//
// /
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//Course                        CPSC 131 Data Structures, Fall, 2022
//Assignment                    No.5 question:1
//Due date                      09/28/2022
// Purpose:
// This program prints out 10 random numbers, alphabets and months
//
// list of libraries
//
//importing the required libraries

#include <iostream>
#include "STACKPAC.h"


//main function
int main()
{
    srand(time(0));

    //Declaring the stack NUM to store random Numbers
    Stack<int,100> NUM;
    NUM.clearStack();   //clearing the stack

    //Storing random Numbers to the stack NUM
    for (int i = 0; i < 10; i++) {
        int x = rand() % 30;
        NUM.pushStack(x);
    }

    //Printing the stack NUM
    std::cout << "Numbers: ";
    while (!NUM.emptyStack())
    {
        int n = NUM.popStack();
        std::cout << n << " ";

    }

    std::cout << std::endl;

```

```
46      //Declaring the stack ALPHA to store the random characters
47      Stack <char,100> ALPHA;
48      ALPHA.clearStack(); //clearing the stack
49
50      //Storing random characters to the stack ALPHA
51      for (int i = 0; i < 10; i++) {
52          ALPHA.pushStack(rand() % 26 + 65);
53      }
54
55      //Printing the stack ALPHA
56      std::cout << std::endl;
57      std::cout << "Uppercase letters: ";
58      while (!ALPHA.emptyStack())
59      {
60          char c= ALPHA.popStack();
61          std::cout << c << " ";
62
63      }
64
65      std::cout << std::endl;
66
67      //Defining an array to store the Months
68      std::string m[] = { "JAN", "FEB", "MAR", "APR", "MAY", "JUN", "JUL",
          "AUG", "SEP", "OCT", "NOV", "DEC" };
69
70      //Declaring the stack MONTHS
71      Stack <std::string,100> MONTHS;
72      MONTHS.clearStack(); //clearing the stack
73
74      //Storing the months randomly
75      for (int i = 0; i < 10; i++) {
76          MONTHS.pushStack(m[rand() % 12]);
77      }
78
79      //Printing the stack MONTHS
80      std::cout << std::endl;
81      std::cout << "Months: ";
82      while (!MONTHS.emptyStack())
83      {
84          std::string s = MONTHS.popStack();
85          std::cout << s << " ";
86
87      }
88
89      std::cout << std::endl;
90
91      return 0;
92  }
93
```