

TASK:

TASK H1: with each of the 4 marked statements immediately below, explain, in plain English,

- what the statement does and
- its purpose in the program.

const int MAXSTACKSIZE = 5; - TASK H1.1 Explain this statement

const int BOTTOMOFSTACK = -1; - TASK H1.2 Explain this statement

typedef char StackElement; -TASK H1.3 Explain this statement

TASK H1.4 Explain this statement

```
typedef struct {  
StackElement contents[MAXSTACKSIZE];  
int top;  
} Stack;
```

Answer:

H1.1: **MAXSTACKSIZE** – is a constant that represents integer value 5. This variable is used in structure as a size of “contents” array.

H1.2: **BOTTOMOFSTACK** – is a constant that represents integer value -1. In the program this variable will represent the state when the Stack is empty -. if(top == **BOTTOMOFSTACK**) /*than Stack is empty*/

H1.3: StackElement – declaration of a new type that represents char(or other type you need). In C programs that approach is used to enable template classes. Each time you change the type in this typedef you change the template specification for **Stack** structure.

H1.4: This statement determines new type **Stack** that represents template structure with array “**contents**” and int “**top**” variable. To create an instance you need: Stack [variablename];