Design an ADT for a two-color, double-stack ADT that consists of two stacks—

one “red” and one “blue”—and has as its operations color-coded versions of the

regular stack ADT operations. For example, this ADT should support both a

redPush operation and a bluePush operation. Give an efficient implementation

of this ADT using a single array whose capacity is set at some value *N* that is

assumed to always be larger than the sizes of the red and blue stacks combined.