6. We chose pictorial Invariant B and Invariant C.

Invariant B:

We have three variables: red, white, and blue. We initialized red and white as 0, and blue as size-1. The variable red records the largest index of all sorted “red” elements; the variable white records the largest index of all sorted “white” elements; the variable blue records the smallest index of all sorted “blue” elements. The variable white and blue are the lower and higher boundaries respectively of the unprocessed colors.

Invariant C:

We have three variables: red, white, and blue. We initialized red as 0, and blue and white as size-1. The variable red records the largest index of all sorted “red” elements; the variable white records the smallest index of all sorted “white” elements; the variable blue records the smallest index of all sorted “blue” elements. The variable red and white are the lower and higher boundaries respectively of the unprocessed colors.