

$$S_{1} \qquad \cdots \qquad S_{k+1} = j \qquad S_{k+2} \qquad \cdots \qquad S_{n}$$

$$X_{1} \qquad \cdots \qquad X_{k} \qquad X_{k+1} \qquad X_{k+2} \qquad \cdots \qquad X_{n}$$