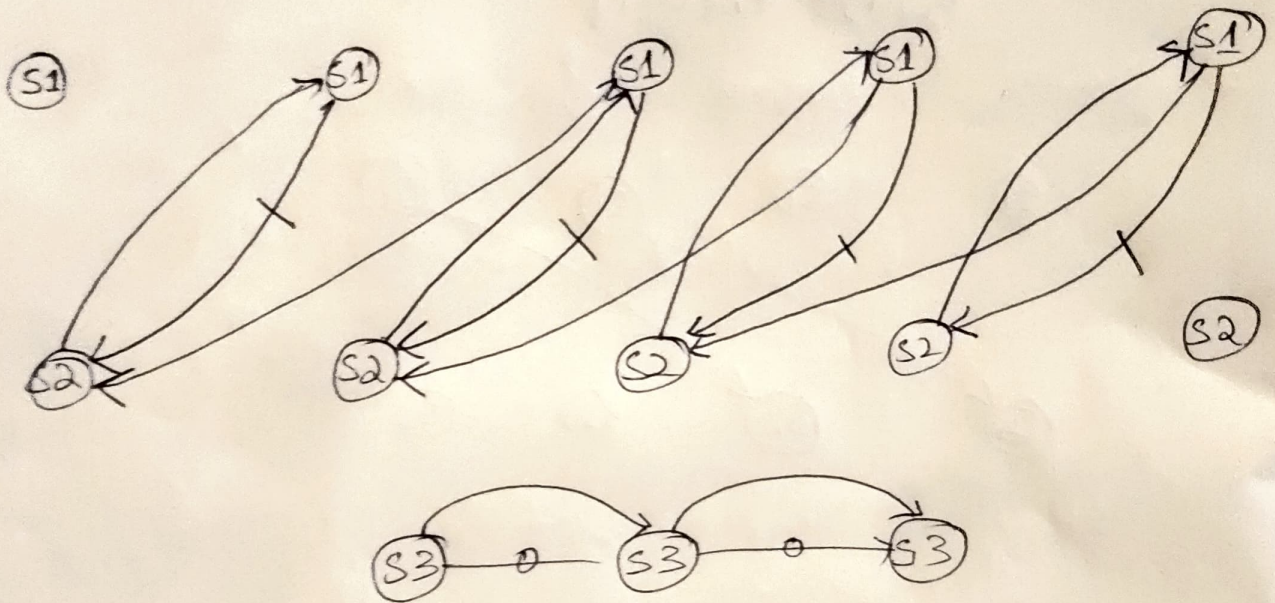


Assignment #1

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SP23-BCS-005

(a)



Part (b)

```
For (i=1 ; i ≤ 50 ; i++) {
```

```
    Anew[i] = B[i-1] + c[i]
```

```
}
```

```
For (i=1 ; i ≤ 50 ; i++) {
```

```
    Bnew[i] = Anew[i+2] + c[i]
```

```
sum = 0
```

```
For (i=1 ; i ≤ 50 ; i++) {
```

```
    sum += c[i];
```

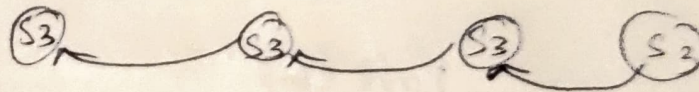
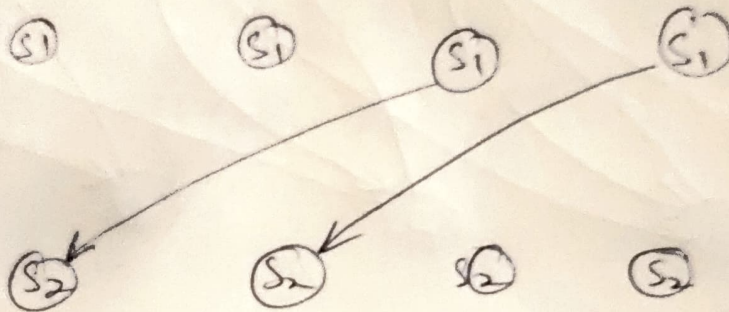

$S = \text{sum}$

For ($i=1$; $i \leq 50$; $i++$) {

$A[i] = A_{\text{new}}[i]$

$B[i] = B_{\text{new}}[i]$

}



Port C

Pragma omp parallel

Pragma omp for

```
for (i=1 ; i ≤ 50 ; i++) {  
    Anew[i] = [i-1] + C[i];  
}
```

Pragma omp for

```
for (int i = 1 ; i ≤ 50 ; i++) {  
    Bnew[i] = Anew[i+2] + C[i];  
}
```

int sum = 0;

Pragma omp for reduction (+: sum)

```
for (int i = 1 ; i ≤ 50 ; i++) {  
    sum += C[i];  
}
```

pragma omp single {

s = sum;

}

Pragma omp for

```
for (int i = 1 ; i ≤ 50 ; i++) {
```

A[i] = Anew[i];

B[i] = Bnew[i];

}

}