

MSc. Computer Science
Sem – III
AOS

Assignment 3

GROUP C:

NAME	UNIVERSITY ROLL NO.
MADHURIMA SEN	C91-CSC-201010
SNIGDHADIP BANERJEE	C91-CSC-201020
KANKANA GHOSH	C91-CSC-201008
RATNA MITRA GHOSH	C91-CSC-201016

Link to the executable code

https://github.com/snigdhadip99/Msc_3rd-Sem_AOS/blob/main/Raymonds-Algorithm.py

Data Sets

- The program takes the number of nodes as input at run time

Enter number of nodes: 4

Screenshots

```
"c:/Users/KANKANA GHOSH/AppData/Local/Programs/Python/Python38/AOS prac/Raymonds-Algorithm.py"
Enter number of nodes: 4
|- 0 ( free , queue: [] )
    |- 1 ( free , queue: [] )
        |- 2 ( free , queue: [] )
            |- 3 ( free , queue: [] )

|- 0 ( free , queue: [] )
    |- 1 ( free , queue: [] )
        |- 2 ( free , queue: [] )
            |- 3 ( free , queue: [] )

|- 0 ( free , queue: [] )
    |- 1 ( free , queue: [] )
        |- 2 ( free , queue: [] )
            |- 3 ( free , queue: [] )

|- 0 ( free , queue: [] )
    |- 1 ( free , queue: [] )
        |- 2 ( free , queue: [] )
            |- 3 ( free , queue: [] )

|- 0 ( free , queue: [] )
    |- 1 ( free , queue: [] )
        |- 2 ( free , queue: [] )
            |- 3 ( free , queue: [] )

|- 3 ( crit , queue: [] )
    |- 2 ( free , queue: [] )
        |- 1 ( free , queue: [] )
            |- 0 ( free , queue: [] )

|- 3 ( crit , queue: [] )
    |- 2 ( free , queue: [] )
        |- 1 ( free , queue: [] )
            |- 0 ( free , queue: [] )

|- 3 ( free , queue: [] )
    |- 2 ( free , queue: [] )
        |- 1 ( free , queue: [] )
            |- 0 ( free , queue: [] )
```

```
|- 1 ( crit , queue: [] )  
  |- 0 ( free , queue: [] )  
  |- 2 ( free , queue: [] )  
    |- 3 ( free , queue: [] )
```

```
|- 1 ( crit , queue: [] )  
  |- 0 ( free , queue: [] )  
  |- 2 ( free , queue: [] )  
    |- 3 ( free , queue: [] )
```

```
|- 1 ( free , queue: [] )  
  |- 0 ( free , queue: [] )  
  |- 2 ( free , queue: [] )  
    |- 3 ( free , queue: [] )
```

```
|- 1 ( free , queue: [] )  
  |- 0 ( free , queue: [] )  
  |- 2 ( free , queue: [] )  
    |- 3 ( free , queue: [] )
```

```
|- 1 ( free , queue: [] )  
  |- 0 ( free , queue: [] )  
  |- 2 ( free , queue: [] )  
    |- 3 ( free , queue: [] )
```

```
|- 1 ( free , queue: [] )  
  |- 0 ( free , queue: [] )  
  |- 2 ( free , queue: [] )  
    |- 3 ( free , queue: [] )
```

```
|- 1 ( free , queue: [] )  
  |- 0 ( free , queue: [] )  
  |- 2 ( free , queue: [] )  
    |- 3 ( free , queue: [] )
```

```
|- 1 ( free , queue: [] )  
  |- 0 ( free , queue: [] )  
  |- 2 ( free , queue: [] )  
    |- 3 ( free , queue: [] )
```

```
|- 1 ( crit , queue: [] )  
  |- 0 ( free , queue: [] )  
  |- 2 ( free , queue: [] )  
    |- 3 ( free , queue: [] )
```

```
|- 3 ( crit , queue: [] )  
  |- 2 ( free , queue: [] )  
    |- 1 ( free , queue: [] )  
      |- 0 ( free , queue: [] )
```

```
|- 3 ( crit , queue: [] )  
  |- 2 ( free , queue: [] )  
    |- 1 ( free , queue: [] )  
      |- 0 ( free , queue: [] )
```

```
|- 2 ( crit , queue: [] )  
  |- 1 ( free , queue: [] )  
    |- 0 ( free , queue: [] )  
      |- 3 ( free , queue: [] )
```

```

|- 2 ( crit , queue: [] )
  |- 1 ( free , queue: [] )
    |- 0 ( free , queue: [] )
  |- 3 ( free , queue: [] )

|- 2 ( free , queue: [] )
  |- 1 ( free , queue: [] )
    |- 0 ( free , queue: [] )
  |- 3 ( free , queue: [] )

|- 2 ( free , queue: [] )
  |- 1 ( free , queue: [] )
    |- 0 ( free , queue: [] )
  |- 3 ( free , queue: [] )

|- 3 ( crit , queue: [2] )
  |- 2 ( free , queue: [] )
    |- 1 ( free , queue: [] )
      |- 0 ( wait , queue: [] )

|- 3 ( free , queue: [2] )
  |- 2 ( free , queue: [] )
    |- 1 ( free , queue: [] )
      |- 0 ( wait , queue: [] )

|- 0 ( crit , queue: [] )
  |- 1 ( free , queue: [] )
    |- 2 ( free , queue: [] )
      |- 3 ( free , queue: [] )

|- 3 ( crit , queue: [] )
  |- 2 ( free , queue: [] )
    |- 1 ( free , queue: [] )
      |- 0 ( free , queue: [] )

|- 3 ( crit , queue: [2] )
  |- 2 ( wait , queue: [2] )
    |- 1 ( wait , queue: [] )
      |- 0 ( free , queue: [] )

|- 1 ( crit , queue: [2] )
  |- 0 ( free , queue: [] )
  |- 2 ( wait , queue: [] )
    |- 3 ( free , queue: [] )

|- 1 ( free , queue: [2] )
  |- 0 ( free , queue: [] )
  |- 2 ( wait , queue: [] )
    |- 3 ( free , queue: [] )

|- 2 ( crit , queue: [] )
  |- 1 ( free , queue: [] )
    |- 0 ( free , queue: [] )
  |- 3 ( free , queue: [] )

|- 2 ( free , queue: [] )
  |- 1 ( free , queue: [] )
    |- 0 ( free , queue: [] )
  |- 3 ( free , queue: [] )

```

```
|- 0 ( crit , queue: [1] )
  |- 1 ( free , queue: [] )
    |- 2 ( wait , queue: [] )
      |- 3 ( free , queue: [] )
```

```
|- 0 ( free , queue: [] )
```

```
|- 2 ( crit , queue: [1] )
  |- 1 ( wait , queue: [] )
    |- 0 ( free , queue: [] )
  |- 3 ( free , queue: [] )
```

```
|- 1 ( crit , queue: [] )
  |- 0 ( free , queue: [] )
  |- 2 ( free , queue: [] )
    |- 3 ( free , queue: [] )
```

```
|- 1 ( crit , queue: [0] )
  |- 0 ( wait , queue: [] )
  |- 2 ( free , queue: [] )
    |- 3 ( free , queue: [] )
```

```
|- 0 ( crit , queue: [] )
  |- 1 ( free , queue: [] )
    |- 2 ( free , queue: [] )
      |- 3 ( free , queue: [] )
```

```
|- 0 ( free , queue: [] )
  |- 1 ( free , queue: [] )
    |- 2 ( free , queue: [] )
      |- 3 ( free , queue: [] )
```

```
|- 0 ( free , queue: [] )
  |- 1 ( free , queue: [] )
    |- 2 ( free , queue: [] )
      |- 3 ( free , queue: [] )
```

```
|- 0 ( free , queue: [] )
  |- 1 ( free , queue: [] )
    |- 2 ( free , queue: [] )
      |- 3 ( free , queue: [] )
```

```
|- 0 ( free , queue: [] )
  |- 1 ( free , queue: [] )
    |- 2 ( free , queue: [] )
      |- 3 ( free , queue: [] )
```

```
|- 0 ( free , queue: [] )
  |- 1 ( free , queue: [] )
    |- 2 ( free , queue: [] )
      |- 3 ( free , queue: [] )
```

```
|- 0 ( free , queue: [] )
  |- 1 ( free , queue: [] )
    |- 2 ( free , queue: [] )
      |- 3 ( free , queue: [] )
```

```
|- 0 ( free , queue: [] )  
  |- 1 ( free , queue: [] )  
    |- 2 ( free , queue: [] )  
      |- 3 ( free , queue: [] )
```

```
|- 0 ( free , queue: [] )  
  |- 1 ( free , queue: [] )  
    |- 2 ( free , queue: [] )  
      |- 3 ( free , queue: [] )
```

```
|- 0 ( free , queue: [] )  
  |- 1 ( free , queue: [] )  
    |- 2 ( free , queue: [] )  
      |- 3 ( free , queue: [] )
```

```
|- 0 ( free , queue: [] )  
  |- 1 ( free , queue: [] )  
    |- 2 ( free , queue: [] )  
      |- 3 ( free , queue: [] )
```

```
|- 0 ( free , queue: [] )  
  |- 1 ( free , queue: [] )  
    |- 2 ( free , queue: [] )  
      |- 3 ( free , queue: [] )
```

```
|- 2 ( crit , queue: [-3] )  
  |- 1 ( done , queue: [] )  
    |- 0 ( done , queue: [] )  
      |- 3 ( done , queue: [] )
```

```
|- 2 ( done , queue: [] )  
  |- 1 ( done , queue: [] )  
    |- 0 ( done , queue: [] )  
      |- 3 ( done , queue: [] )
```