Task 2

All Possible Traffic Light Combinations at a Junction

**Aim :**

To list out all possible combinations of the traffic lights mode combinations for all possible traffic signal junction also giving a typecode for reach setting..

**Use :**

In Function **Analyse Traffic Signal Junction .**

**Note** : *typecode* for each type of traffic signal junction will be in the following format.

<number of adjacent nodes>.<case number>

1. **3 Adjacent Nodes (Three TSL’s)**
   1. **Case 1:**
      * **Type Code : 3.1**
      * **Number of Sub-Cases :**
      * **Image :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sub-Case** | **Traffic Light Mode** | | | **Description** |
| **TSL 1**  **(TSL0001)** | **TSL 2**  **(TSL0002)** | **TSL 3**  **(TSL0003)** |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |

* 1. **Case 2:**
     + **Type Code : 3.2**
     + **Number of Sub-Cases :**
     + **Image :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sub-Case** | **Traffic Light Mode** | | | **Description** |
| **TSL 1**  **(TSL0001)** | **TSL 2**  **(TSL0002)** | **TSL 3**  **(TSL0003)** |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |

* 1. **Case 3:**
     + **Type Code : 3.3**
     + **Number of Sub-Cases :**
     + **Image :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sub-Case** | **Traffic Light Mode** | | | **Description** |
| **TSL 1**  **(TSL0001)** | **TSL 2**  **(TSL0002)** | **TSL 3**  **(TSL0003)** |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |

* 1. **Case 4:**
     + **Type Code : 3.4**
     + **Number of Sub-Cases :**
     + **Image :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sub-Case** | **Traffic Light Mode** | | | **Description** |
| **TSL 1**  **(TSL0001)** | **TSL 2**  **(TSL0002)** | **TSL 3**  **(TSL0003)** |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |

* 1. **Case 5:**
     + **Type Code : 3.5**
     + **Number of Sub-Cases :**
     + **Image :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sub-Case** | **Traffic Light Mode** | | | **Description** |
| **TSL 1**  **(TSL0001)** | **TSL 2**  **(TSL0002)** | **TSL 3**  **(TSL0003)** |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |

1. **4 Adjacent Nodes (Three TSL’s)**
   1. **Case 1:**
      * **Type Code : 4.1**
      * **Number of Sub-Cases :**
      * **Image :**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sub-Case** | **Traffic Light Mode** | | | | **Description** |
| **TSL 1**  **(TSL0001)** | **TSL 2**  **(TSL0002)** | **TSL 3**  **(TSL0003)** | **TSL 4**  **(TSL0004)** |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |

* 1. **Case 2:**
     + **Type Code : 4.2**
     + **Number of Sub-Cases :**
     + **Image :**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sub-Case** | **Traffic Light Mode** | | | | **Description** |
| **TSL 1**  **(TSL0001)** | **TSL 2**  **(TSL0002)** | **TSL 3**  **(TSL0003)** | **TSL 4**  **(TSL0004)** |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |

* 1. **Case 3:**
     + **Type Code : 4.1**
     + **Number of Sub-Cases :**
     + **Image :**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sub-Case** | **Traffic Light Mode** | | | | **Description** |
| **TSL 1**  **(TSL0001)** | **TSL 2**  **(TSL0002)** | **TSL 3**  **(TSL0003)** | **TSL 4**  **(TSL0004)** |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |

* 1. **Case 4:**
     + **Type Code : 4.4**
     + **Number of Sub-Cases :**
     + **Image :**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sub-Case** | **Traffic Light Mode** | | | | **Description** |
| **TSL 1**  **(TSL0001)** | **TSL 2**  **(TSL0002)** | **TSL 3**  **(TSL0003)** | **TSL 4**  **(TSL0004)** |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |

* 1. **Case 5:**
     + **Type Code : 4.5**
     + **Number of Sub-Cases :**
     + **Image :**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sub-Case** | **Traffic Light Mode** | | | | **Description** |
| **TSL 1**  **(TSL0001)** | **TSL 2**  **(TSL0002)** | **TSL 3**  **(TSL0003)** | **TSL 4**  **(TSL0004)** |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |

* 1. **Case 6:**
     + **Type Code : 4.6**
     + **Number of Sub-Cases :**
     + **Image :**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sub-Case** | **Traffic Light Mode** | | | | **Description** |
| **TSL 1**  **(TSL0001)** | **TSL 2**  **(TSL0002)** | **TSL 3**  **(TSL0003)** | **TSL 4**  **(TSL0004)** |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |