**Exercise 2 – Ripple Join**

1. Do not assume any heartbeats or punctuations.

**Time: 09:45**

Sweep Area 1

|  |  |  |
| --- | --- | --- |
| in\_006 | Inf\_121\_003 | [09:35 – 10:05] |
| in\_007 | Aut\_175\_101 | [09:37 – 10:07] |
| in\_008 | Inf\_113\_021 | [09:42 – 10:12] |

Sweep Area 2

|  |  |  |
| --- | --- | --- |
|  |  |  |

Output Buffer

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |

**Time: 10:55**

Sweep Area 1

|  |  |  |
| --- | --- | --- |
| in\_011 | Siv\_014\_035 | [10:33 – 11:03] |
| in\_012 | Wirt\_025\_021 | [10:43 – 11:13] |
| in\_013 | Med\_147\_102 | [10:50 – 11:20] |

Sweep Area 2

|  |  |  |
| --- | --- | --- |
| out\_027 | Aut\_175\_101 | [10:21 – 10:51] |
| out\_028 | Mab\_024\_014 | [10:31 – 11:01] |
| out\_029 | Inf\_001\_174 | [10:54 – 11:24] |

Output Buffer

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |

**Time: 11:41**

Sweep Area 1

|  |  |  |
| --- | --- | --- |
| in\_012 | Wirt\_025\_021 | [10:43 – 11:13] |
| in\_013 | Med\_147\_102 | [10:50 – 11:20] |
| in\_014 | Aut\_401\_201 | [11:02 – 11:32] |
| in\_015 | Arc\_104\_715 | [11:05 – 11:35] |

Sweep Area 2

|  |  |  |
| --- | --- | --- |
| out\_029 | Inf\_001\_174 | [10:54 – 11:24] |
| out\_030 | Wirt\_025\_021 | [11:11 – 11:41] |

Output Buffer

|  |  |  |  |
| --- | --- | --- | --- |
| in\_012 | out\_030 | Wirt\_025\_021 | [11:11 – 11:13] |

b) What would change if there were a heartbeat every second? Please fill the template again:

**Time: 09:45**

Sweep Area 1

|  |  |  |
| --- | --- | --- |
| in\_006 | Inf\_121\_003 | [09:35 – 10:05] |
| in\_007 | Aut\_175\_101 | [09:37 – 10:07] |
| in\_008 | Inf\_113\_021 | [09:42 – 10:12] |

Sweep Area 2

|  |  |  |
| --- | --- | --- |
|  |  |  |

Output Buffer

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |

**Time: 10:55**

Sweep Area 1

|  |  |  |
| --- | --- | --- |
| in\_011 | Siv\_014\_035 | [10:33 – 11:03] |
| in\_012 | Wirt\_025\_021 | [10:43 – 11:13] |
| in\_013 | Med\_147\_102 | [10:50 – 11:20] |

Sweep Area 2

|  |  |  |
| --- | --- | --- |
| out\_028 | Mab\_024\_014 | [10:31 – 11:01] |
| out\_029 | Inf\_001\_174 | [10:54 – 11:24] |

Output Buffer

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |

**Time: 11:41**

Sweep Area 1

|  |  |  |
| --- | --- | --- |
|  |  |  |

Sweep Area 2

|  |  |  |
| --- | --- | --- |
| out\_30 | Wirt\_025\_021 | [11:11 – 11:41] |

Output Buffer

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |