**第六次作业**

**P25.**

答：

算法结果表如表1.所示。

**表1.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Step** | **N’** | **D(t), P(t)** | **D(u), P(u)** | **D(v), P(v)** | **D(w), P(w)** | **D(y), P(y)** | **D(z), P(z)** |
| 0 | x |  |  | **3, x** | 6, x | 6, x | 8, x |
| 1 | xv | 7, v | **6, v** |  | 6, x | 6, x | 8, x |
| 2 | xvu | 7, v |  |  | **6, x** | 6, x | 8, x |
| 3 | xvuw | 7, v |  |  |  | **6, x** | 8, x |
| 4 | xvuwy | **7, v** |  |  |  |  | 8, x |
| 5 | xvuwyt |  |  |  |  |  | **8, x** |
| 6 | xvuwytz |  |  |  |  |  |  |

**P27.**

答：

1. 算法结果表如表2.所示。。

**表2.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Step** | **N’** | **D(x), P(x)** | **D(u), P(u)** | **D(v), P(v)** | **D(w), P(w)** | **D(t), P(t)** | **D(z), P(z)** |
| 0 | y | **6, y** |  | 8, y |  | 7, y | 12, y |
| 1 | yx |  |  | 8, y | 12, x | **7, y** | 12, y |
| 2 | yxt |  | 9, t | **8, y** | 12, x |  | 12, y |
| 3 | yxtv |  | **9, t** |  | 12, x |  | 12, y |
| 4 | yxtvu |  |  |  | **12, x** |  | 12, y |
| 5 | yxtvuw |  |  |  |  |  | 12, y |
| 6 | yxtvuwz |  |  |  |  |  |  |

1. 算法结果表如表3.所示。

**表3.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Step** | **N’** | **D(x), P(x)** | **D(u), P(u)** | **D(v), P(v)** | **D(w), P(w)** | **D(y), P(y)** | **D(z), P(z)** |
| 0 | t |  | **2, t** | 4, y |  | 7, t |  |
| 1 | tu |  |  | **4, t** | 5, u | 7, t |  |
| 2 | tuv | 7, v |  |  | **5, u** | 7, t |  |
| 3 | tuvw | **7, v** |  |  |  | 7, t |  |
| 4 | tuvwx |  |  |  |  | **7, t** | 15, x |
| 5 | tuvwxy |  |  |  |  |  | **15, x** |
| 6 | tuvwxyz |  |  |  |  |  |  |

1. P25 图中并无节点 ***s*** 可能是印刷错误
2. 算法结果表如表4.所示

**表4.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Step** | **N’** | **D(x), P(x)** | **D(t), P(t)** | **D(v), P(v)** | **D(w), P(w)** | **D(y), P(y)** | **D(z), P(z)** |
| 0 | u |  | **2, u** | 3, u | 3, u |  |  |
| 1 | ut |  |  | **3, u** | 3, u | 9, t |  |
| 2 | utv | 6, v |  |  | **3, u** | 9, t |  |
| 3 | utvw | **6, v** |  |  |  | 9, t | 14, x |
| 4 | utvwx |  |  |  |  | **9, t** | 14, x |
| 5 | utvwxy |  |  |  |  |  | **14, x** |
| 6 | utvwxyz |  |  |  |  |  |  |

1. 算法结果表如表5.所示

**表5.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Step** | **N’** | **D(x), P(x)** | **D(u), P(u)** | **D(v), P(v)** | **D(t), P(t)** | **D(y), P(y)** | **D(z), P(z)** |
| 0 | w | 6, w | **3, w** | 4, w |  |  |  |
| 1 | wu | 6, w |  | **4, w** | 5, u |  |  |
| 2 | wuv | 6, w |  |  | **5, u** | 12, v |  |
| 3 | wuvt | **6, w** |  |  |  | 12, v |  |
| 4 | wuvtx |  |  |  |  | **12, v** | 14, x |
| 5 | wuvtx |  |  |  |  |  | **14, x** |
| 6 | wuvtxz |  |  |  |  |  |  |

1. 算法结果表如表6.所示

**表6.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Step** | **N’** | **D(x), P(x)** | **D(u), P(u)** | **D(t), P(t)** | **D(w), P(w)** | **D(y), P(y)** | **D(z), P(z)** |
| 0 | v | **3, v** | 3, v | 4, v | 4, v | 8, v |  |
| 1 | vx |  | **3, v** | 4, v | 4, v | 8, v | 11, x |
| 2 | vxu |  |  | **4, v** | 4, v | 8, v | 11, x |
| 3 | vxut |  |  |  | **4, v** | 8, v | 11, x |
| 4 | vxutw |  |  |  |  | **8, v** | 11, x |
| 5 | vxutwy |  |  |  |  |  | **11, x** |
| 6 | vxutwyz |  |  |  |  |  |  |

1. 算法结果表如表7.所示

**表7.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Step** | **N’** | **D(x), P(x)** | **D(u), P(u)** | **D(v), P(v)** | **D(w), P(w)** | **D(y), P(y)** | **D(t), P(t)** |
| 0 | z | **8, z** |  |  |  | 12, z |  |
| 1 | zx |  |  | **11, x** | 14, x | 12, z |  |
| 2 | zxv |  | 14, v |  | 14, x | 12, z | 15, v |
| 3 | zxvy |  | **14, v** |  | 14, x |  | 15, v |
| 4 | zxvyu |  |  |  | **14, x** |  | 15, v |
| 5 | zxvyuw |  |  |  |  |  | **15, v** |
| 6 | vxutwyz |  |  |  |  |  |  |