LAPORAN PRAKTIKUM

ANALISA ALGORITMA

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PROGRAM STUDI S-1 TEKNIK INFORMATIKA

UNIVERSITAS PADJADJARAN

2018 / 2019

Process

- Victor matched with Bertha Bertha still free → Then (victor , Bertha)
- Wyatt matched with Diane Diane still free → Then (Wyatt,Diane)
- Xavier matched with Bertha Bertha was taken with victor before but Bertha prefers Xavier than Victor → Then (Xavier,Bertha) Victor Free
- Yancey matched with Amy Amy still free → Then (Yancey,Amy)
- Zeus matched with Bertha Bertha was taken with Xavier before but Bertha prefers Xavier than Zeus → Then (Xavier,Bertha) Zeus free

   Free : Victor , Yancey , Zeus

- Victor matched with Amy Amy was taken with Yancey before but Amy preferes Victor than Yancey → Then (Victor , Amy) Yancey free
- Yancey matched with Diane Diane was taken with Wyatt before but Diane prefers Yancey than Wyatt → Then (Yancey , Diane) Wyatt free
- Zeus matched with Diane Diane was taken with Yancey before but Diane prefers Zeus than Yancey Then (Zeus, Diane) Yancey free

   Free : Yancey , Wyatt

- Wyatt matched with Bertha Bertha was taken with Xavier and Bertha is still prefers Xavier → Then Wyatt free
- Yancey matched with Clare Clare free → Then (Yancey , Clare)

   Free : Wyatt

- Wyatt matched with Amy Amy was taken with Victor before and Amy is still prefer Victor → Then Wyatt free

   Free : Wyatt

- Wyatt matched with Clare Clare was taken with Yancey but Clare prefers Wyatt than Yancey → Then (Wyatt , Clare) Yancey free

   Free : Yancey

- Yancey matched with Bertha Bertha was taken with Xavier before and Bertha is still prefer Xavier → Then Yancey free

  Free: Yancey

- Yancey matched with Erika Erika free → Then (Yancey, Erika)

  Free : Nothing , everybody got their relationship

Final Result

• Yancey, Erika

• Wyatt, Clare

• Victor, Amy

• Xavier, Bertha

• Zeus, Diane

Teorema (1.3)

Algoritma G-S paling banyak melakukan iteasi sebesar n^2, dalam contoh kasus terdapat 16 kali loop dengan 4 pasangan

Teorema (1,4)

Saat ada seorang yang single, otomatis masih ada lawan jenis yang juga masih single. Pada dasarnya algoritma GS setiap wanita maupun pria mendapatkan pasangan, sekalipun dalam kemungkinan terburuk

Teorema (1,5)

Algoritma ini dapat dikatakan perfect matching, karena sekalipun proses penghubungan dilakukan dengan prioritas, namun akhirnya semua akan memiliki pasangan.

Teorema (1,6) Dalam kondisi ini pada akhirnya tidak ada yang dapat menolak pasangan yang didapat. Pada algoritma G-S ini tentunya akan mencocokan dengan beberapa kali loop namun akan selalu menghasilkan sebuah data yang stabil dari awal pencocokan hingga di akhir.