LAPORAN PRAKTIKUM

WORKSHEET 1

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Kelas B

FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM

UNIVERSITAS PADJADJARAN

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Worksheet 01

Dengan Algoritma Gale-Shapley, cari himpunan stable-matching yang sesuai dengan preference lists berikut ini. Gunakan processor terhebat yang Anda miliki (otak) untuk mengikuti algoritma G-S dan output tidak perlu diuraikan per-looping tetapi Anda harus memahami hasil setiap looping.

Men's Preferences Profile

	0th	1st	2nd	3rd	4th
Victor	Bertha	Amy	Diane	Erika	Clare
Wyatt	Diane	Bertha	Amy	Clare	Erika
Xavier	Bertha	Erika	Clare	Diane	Amy
Yancey	Amy	Diane	Clare	Bertha	Erika
Zeus	Bertha	Diane	Amy	Erika	Clare

Women's Preferences Profile

	0th	1st	2nd	3rd	4th
Amy	Zeus	Victor	Wyatt	Yancey	Xavier
Bertha	Xavier	Wyatt	Yancey	Victor	Zeus
Clare	Wyatt	Xavier	Yancey	Zeus	Victor
Diane	Victor	Zeus	Yancey	Xavier	Wyatt
Erika	Yancey	Wyatt	Zeuss	Xavier	Victor

Rules :

Initially all $m \in M$ and $w \in W$ are free

While there is a man m who is free and hasn't proposed to every woman

    Choose such a man m
    Let w be the highest-ranked woman in m's preference list
        to whom m has not yet proposed
    If w is free then
        (m, w) become engaged
    Else w is currently engaged to m'
        If w prefers m' to m then
          m remains free
        Else w prefers m to m'
          (m, w) become engaged
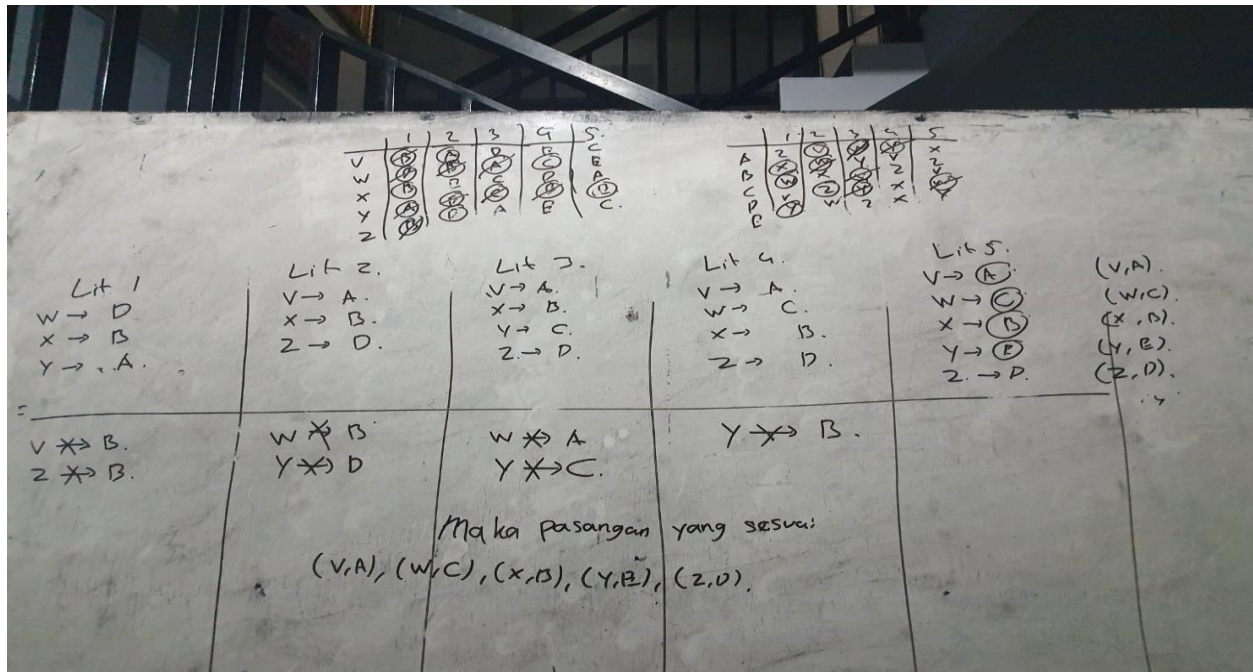 m' become free
       Endif
      Endif
  Endwhile
  Return the set S of engaged pairs

Jawaban

Pasangan yang didapat dan sama seperti output program

([Victor, Amy] , [Wyatt, Clare] , [Xavier, Bertha] , [Yancer, Erika] , [Zeus, Diane])