

Practica 1 TALF

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1 Ejercicio 1

1. Find the power set $R3$ of $R = (1, 1), (1, 2), (2, 3), (3, 4)$. Check your answer with the script `powerrelation.m` and write a LATEX document with the solution step by step.

Teoría

Sabemos que podemos extraer pares de datos de la siguiente manera:

$[R1 \rightarrow (x, b)$

$Rn1 \rightarrow (a, x)]$

Donde x será el pivote e iremos formando pares con a y b .

Solución

Es necesario conocer $R2$ para llegar a $R3$.

$R1 = [(1, 1), (1, 2), (2, 3), (3, 4)]$

$R2 = [(1, 1), (1, 2), (1, 3), (3, 4)]$

$R3 = [(1, 1), (1, 2), (1, 3), (1, 4)]$

```
des Terminal 31 de oct 19:27
juanfran@juanfran-Aspire-A315-53G: ~
. .config .pki .vscode
.. .gitconfig .profile Descar
.bash_history .gnupg .python_history Docume
.bash_logout .local .ssh Escri
.bashrc .mozilla .sudo_as_admin_successful Imágen
.cache .octave_hist .thunderbird Música
octave:3> cd Documentos/talfuma/software/math/
octave:4> powerrelation({'1','1'}, ['1','2'], ['2','3'], ['3','4'])
ans =
{
  [1,1] = 11
  [1,2] = 12
  [1,3] = 13
  [1,4] = 14
  [1,5] = 23
  [1,6] = 24
  [1,7] = 34
}
octave:5> powerrelation({'1','1'}, ['1','2'], ['2','3'], ['3','4'],2)
ans =
{
  [1,1] = 11
  [1,2] = 12
  [1,3] = 13
  [1,4] = 24
}
octave:6> powerrelation({'1','1'}, ['1','2'], ['2','3'], ['3','4'],3)
ans =
{
  [1,1] = 11
  [1,2] = 12
  [1,3] = 13
  [1,4] = 14
}
```

Octave 4. R1, Octave 5. R2, Octave 6. R3