**ĐẠI HỌC QUỐC GIA THÀNH PHỐ HỒ CHÍ MINH**

**TRƯỜNG ĐẠI HỌC CÔNG NGHỆ THÔNG TIN**

**--------------------oOo--------------------**

**KHAI THÁC DỮ LIỆU**

**(Data Mining)**

**LAB 4**

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🙡🙢 Tp. Hồ Chí Minh, 3/2021 🙠🙣

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1. **Hướng dẫn chung**

Table

Description automatically generated with low confidence

Graphical user interface, application, Word

Description automatically generated

Treemap chart

Description automatically generatedGraphical user interface, text, application, email

Description automatically generatedGraphical user interface, application, table

Description automatically generatedGraphical user interface, text

Description automatically generatedChart, treemap chart

Description automatically generatedA picture containing text, monitor, screen, television

Description automatically generatedChart

Description automatically generatedA picture containing text

Description automatically generatedGraphical user interface, text, application

Description automatically generatedGraphical user interface, text, application

Description automatically generatedA picture containing background pattern

Description automatically generated

1. **Thực hành**

**Bài 1**

Graphical user interface, table

Description automatically generated with medium confidenceGraphical user interface

Description automatically generatedA picture containing graphical user interface

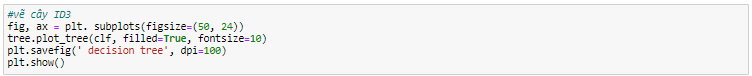
Description automatically generatedGraphical user interface, text, application, email

Description automatically generatedTable

Description automatically generatedText

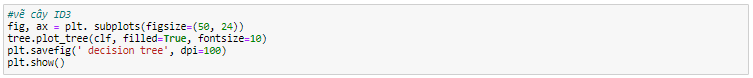
Description automatically generated with medium confidenceText

Description automatically generated with low confidenceGraphical user interface

Description automatically generatedA screen shot of a computer

Description automatically generated with low confidenceGraphical user interface, text, application, email

Description automatically generatedGraphical user interface

Description automatically generatedA screen shot of a computer

Description automatically generated with low confidenceText

Description automatically generatedGraphical user interface

Description automatically generatedGraphical user interface, text, application, email

Description automatically generatedA picture containing text, monitor, screen, dark

Description automatically generated

**Bài 2**

Graphical user interface, table

Description automatically generatedA picture containing application

Description automatically generatedGraphical user interface

Description automatically generatedGraphical user interface, text, application

Description automatically generatedGraphical user interface, table

Description automatically generatedText, email

Description automatically generatedGraphical user interface, text, application

Description automatically generatedChart, treemap chart

Description automatically generatedGraphical user interface, application, Teams

Description automatically generatedGraphical user interface, text, application, email

Description automatically generatedA picture containing text

Description automatically generatedChart, treemap chart

Description automatically generatedGraphical user interface, application, Teams

Description automatically generatedA picture containing table

Description automatically generatedGraphical user interface, text, application

Description automatically generatedChart, treemap chart

Description automatically generatedGraphical user interface, text, application, email

Description automatically generatedA picture containing background pattern

Description automatically generated

**Bài 3**

Phần yêu cầu lập trình phía trên

**Bài 4**

**Table

Description automatically generatedGraphical user interface, application

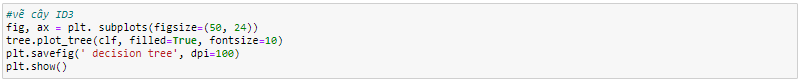
Description automatically generatedA screen shot of a computer

Description automatically generated with low confidenceTable

Description automatically generatedGraphical user interface, text, email

Description automatically generatedText

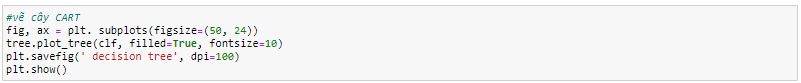
Description automatically generatedTable

Description automatically generated with medium confidenceChart

Description automatically generated with medium confidenceGraphical user interface, text, application, email

Description automatically generatedGraphical user interface, text

Description automatically generatedTable

Description automatically generated with medium confidenceA picture containing indoor

Description automatically generatedGraphical user interface, text, application, email

Description automatically generatedGraphical user interface, text, application

Description automatically generatedGraphical user interface, application

Description automatically generated**

**Bài 5**

**Table

Description automatically generatedGraphical user interface, text, application

Description automatically generatedGraphical user interface

Description automatically generatedGraphical user interface, application

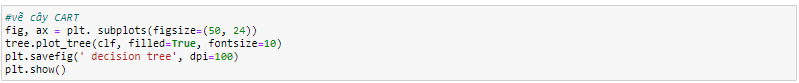
Description automatically generatedGraphical user interface, text, application, email

Description automatically generatedGraphical user interface

Description automatically generated with medium confidenceA screen shot of a computer screen

Description automatically generated with low confidenceGraphical user interface, text

Description automatically generatedGraphical user interface

Description automatically generatedA screen shot of a game

Description automatically generated with low confidenceGraphical user interface, text, application

Description automatically generatedA picture containing background pattern

Description automatically generated**

**Bài 6**

**Graphical user interface, application, table

Description automatically generatedTable

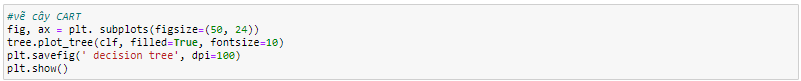
Description automatically generatedGraphical user interface, application, table

Description automatically generatedGraphical user interface, text, application, email

Description automatically generatedGraphical user interface

Description automatically generated with medium confidenceA screenshot of a computer

Description automatically generated with medium confidenceGraphical user interface, text, application, email

Description automatically generatedA screen shot of a computer

Description automatically generated with low confidenceGraphical user interface, text, application, email

Description automatically generatedGraphical user interface, application

Description automatically generated**

**Bài 7**

Graphical user interface, text, application, email

Description automatically generatedGraphical user interface, text, application, email

Description automatically generatedTable

Description automatically generated with medium confidenceGraphical user interface, application

Description automatically generatedGraphical user interface, text, application, email

Description automatically generatedGraphical user interface, text, application, email

Description automatically generated