ᠺᠤᠮᠫᠢᠲᠸᠷ  ᠤᠨ ᠰᠢᠨᠵᠢᠯᠡᠬᠦ ᠤᠬᠠᠭᠠᠨ ᠮᠡᠷᠭᠡᠵᠢᠯ  ᠤᠨ ᠳᠡᠭᠡᠳᠦ ᠰᠤᠷᠭᠠᠭᠤᠯᠢ  ᠶᠢᠨ 2016 ᠮᠤᠨᠭᠭᠤᠯ ᠠᠨᠭᠬᠢ

ᠰᠤᠷᠤᠯᠭ᠎ᠠ  ᠶᠢᠨ ᠨᠤᠮᠸᠷ ᠄20162103956 ᠨᠡᠷ᠎ᠡ᠄ ᠪᠤᠤ ᠰᠠᠴᠦᠷᠠ

# **ᠭᠠᠷᠴᠠᠭ᠄ᠤᠯᠠᠮᠵᠢᠯᠠᠯᠲᠦ ᠮᠤᠩᠭᠤᠯ ᠬᠡᠯᠡ ᠰᠤᠷᠤᠯᠴᠠᠬᠤ ᠰᠢᠰᠲᠸᠮ  ᠤᠨ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢᠳ  ᠤᠨ ᠬᠠᠮᠢᠶᠠᠷᠤᠯᠲᠠ**

## ᠲᠤᠪᠴᠢᠯᠠᠯ᠄

ᠤᠢᠷ᠎ᠠ ᠤᠨ ᠬᠡᠳᠦᠨ ᠵᠢᠯ ᠂ ᠮᠤᠩᠭᠤᠯ ᠤᠯᠤᠰ᠎ ᠤᠨ ᠤᠯᠨᠮᠵᠢᠯᠠᠯᠲᠦ ᠮᠤᠩᠭᠤᠯ ᠬᠡᠯᠡ ᠵᠢ ᠬᠡᠷᠡᠭᠯᠡᠬᠦ ᠵᠢ ᠱᠠᠯᠠᠪᠳᠠᠨ ᠰᠡᠷᠭᠦᠭᠡᠭᠰᠡᠭᠡᠷ ᠢᠷᠡᠭᠰᠡᠨ ᠪᠤᠯᠪᠠᠴᠤ ᠤᠯᠠᠮᠵᠢᠯᠠᠯᠲᠦ ᠮᠤᠩᠭᠤᠯ ᠬᠡᠯᠡ ᠮᠡᠳᠡᠳᠡᠭ ᠬᠦᠮᠦᠨ ᠴᠦᠬᠡᠨ ᠪᠦᠭᠡᠳ ᠤᠯᠠᠮᠵᠢᠯᠠᠯᠲᠦ ᠮᠤᠩᠭᠤᠯ ᠬᠡᠯᠡ ᠰᠤᠷᠤᠯᠴᠠᠬᠤ ᠰᠢᠰ‍ᠲ᠋ᠸᠮ ᠲᠠᠢ ᠰᠦᠯᠵᠢᠶ᠎ᠡ ᠪᠠᠰᠠ ᠪᠠᠢᠬᠤ ᠦᠭᠡᠢ᠃ ᠤᠯᠠᠮᠵᠢᠯᠠᠲᠦ ᠮᠤᠩᠭᠤᠯ ᠦᠭᠡ ᠬᠡᠯᠡ ᠦᠰᠦᠭ ᠪᠢᠴᠢᠭ ᠮᠤᠩᠭᠤᠯ ᠦᠨᠳᠦᠰᠦᠲᠡᠨ  ᠎᠎ ᠤ ᠰᠤᠶᠤᠯ᠎  ᠤᠨ ᠦᠪ ᠬᠦᠷᠦᠩᠭᠡ ᠪᠤᠯᠤᠭᠰᠠᠨ ᠎᠎ ᠤ ᠬᠤᠪᠢ ᠎ ᠳᠦ ᠂ ᠬᠤᠶᠠᠷ ᠤᠯᠤᠰ  ᠤᠨ《ᠨᠢᠭᠡ ᠪᠦᠰᠡ ᠨᠢᠭᠡ ᠵᠠᠮ 》᠎ ᠤᠨ ᠤᠯᠤᠰ ᠲᠦᠷᠦ᠂ ᠠᠵᠤ ᠠᠬᠤᠢ᠂ ᠠᠮᠢ ᠠᠬᠤᠢ  ᠶᠢᠨ ᠰᠢᠰ‍ᠲ᠋ᠸᠮ ᠵᠢ ᠬᠠᠮᠲᠦ ᠪᠡᠷ ᠪᠠᠢᠭᠤᠯᠬᠤ  ᠶᠢᠨ ᠴᠢᠬᠤᠯᠠ ᠰᠠᠭᠤᠷᠢ ᠪᠤᠯᠵᠠᠢ᠃

ᠮᠤᠩᠭᠤᠯ ᠬᠡᠯᠡ ᠰᠤᠷᠤᠯᠴᠠᠬᠤ ᠰᠢᠰ‍‍ᠲ᠋ᠸᠮ᠎  ᠤᠨ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢᠳ  ᠤᠨ ᠰᠤᠷᠤᠯᠴᠠᠭᠰᠠᠨ ᠠᠵᠢᠯᠯᠠᠭ᠎ᠠ ᠬᠢᠭᠡᠳ ᠰᠤᠷᠤᠯᠴᠠᠭᠰᠠᠨ ᠴᠠᠭ ᠵᠢ ᠲᠡᠮᠳᠡᠭᠯᠡᠵᠦ ᠂ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢᠳ ᠤᠨ ᠤᠯᠠᠮᠵᠢᠯᠠᠯᠲᠦ ᠮᠤᠩᠭᠤᠯ ᠬᠡᠯᠡ ᠰᠤᠷᠤᠯᠴᠠᠬᠤ ᠦᠶ᠎ᠡ  ᠳᠦ ᠲᠤᠯᠭᠠᠷᠠᠭᠰᠠᠨ ᠠᠰᠠᠭᠤᠳᠠᠯ ᠵᠢ ᠵᠠᠳᠠᠯᠵᠤ᠂ ᠰᠤᠷᠢᠯᠲᠠ ᠶᠢᠨ ᠰᠡᠳᠦᠪ ᠬᠢᠭᠰᠡᠨ ᠪᠠᠢᠳᠠᠯ ᠪᠡᠷ ᠨᠢ ᠵᠠᠳᠠᠯᠵᠦ ᠂ ᠲᠤᠰᠬᠠᠢ ᠳᠠᠪᠲᠠᠬᠤ ᠲᠦᠯᠦᠪᠯᠡᠯ ᠵᠤᠬᠢᠶᠠᠵᠤ ᠂ ᠵᠠᠳᠠᠯᠦᠯᠲᠠ ᠪᠡᠷ ᠳᠠᠮᠵᠢᠨ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢᠳ  ᠤᠨ ᠨᠡᠩ ᠢᠯᠡᠭᠦᠦ ᠳᠡᠭᠡᠭᠰᠢᠯᠡᠭᠦᠯᠦᠨ᠎ᠡ᠂

## ᠵᠠᠩᠭᠢᠯᠭ᠎ᠠ  ᠶᠢᠨ ᠦᠭᠡ᠄

Java Web᠂ Servlet᠂ Html᠂ Mysql᠂ Echarts᠂ ᠤᠯᠠᠮᠵᠢᠯᠠᠯᠲᠤ ᠮᠤᠨᠭᠭᠤᠯ ᠬᠡᠯᠡ ᠰᠤᠷᠤᠯᠴᠠᠬᠤ ᠰᠢᠰᠲᠸᠮ  ᠶᠢᠨ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢᠳ  ᠤᠨ ᠬᠠᠮᠢᠶᠠᠷᠤᠯᠲᠠ

[**ᠭᠠᠷᠴᠠᠭ᠄ᠤᠯᠠᠮᠵᠢᠯᠠᠯᠲᠦ ᠮᠤᠩᠭᠤᠯ ᠬᠡᠯᠡ ᠰᠤᠷᠤᠯᠴᠠᠬᠤ ᠰᠢᠰᠲᠸᠮ  ᠤᠨ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢᠳ  ᠤᠨ ᠬᠠᠮᠢᠶᠠᠷᠤᠯᠲᠠ** 1](#_Toc36970288)

[ᠲᠤᠪᠴᠢᠯᠠᠯ᠄ 1](#_Toc36970289)

[ᠵᠠᠩᠭᠢᠯᠭ᠎ᠠ  ᠶᠢᠨ ᠦᠭᠡ᠄ 1](#_Toc36970290)

[ᠵᠢᠨᠭᠬᠢᠨᠢ ᠪᠢᠴᠢᠪᠦᠷᠢ᠄ 4](#_Toc36970291)

[**ᠨᠢᠭᠡᠳᠤᠭᠡᠷ ᠪᠦᠯᠦᠭ** ᠤᠳᠤᠷᠢᠳᠬᠠᠯ᠄ 4](#_Toc36970292)

[1.1 ᠰᠤᠳᠤᠯᠭᠠᠨ  ᠤ ᠤᠷᠴᠢᠨ ᠨᠦᠭᠦᠴᠡᠯ ᠂ ᠵᠤᠷᠢᠯᠭ᠎ᠠ ᠬᠢᠭᠡᠳ ᠠᠴᠢ ᠬᠤᠯᠪᠤᠭᠳᠠᠯ 4](#_Toc36970293)

[1.2 ᠤᠳᠤᠬᠢ ᠤᠯᠤᠰ  ᠤᠨ ᠭᠠᠳᠠᠭᠠᠲᠤ ᠲᠤᠲᠤᠭᠠᠲᠤ  ᠳᠡᠬᠢ ᠬᠦᠭᠵᠢᠯᠲᠡ  ᠶᠢᠨ ᠪᠠᠢᠳᠠᠯ 5](#_Toc36970294)

[1.3 ᠰᠤᠳᠤᠯᠭᠠᠨ  ᠤ ᠠᠭᠤᠯᠭ᠎ᠠ 6](#_Toc36970295)

[1.4 ᠲᠤᠰ ᠦᠭᠦᠯᠡᠯ  ᠤᠨ ᠵᠤᠬᠢᠶᠠᠨ ᠪᠠᠢᠭᠤᠯᠤᠯᠲᠠ ᠬᠢᠭᠡᠳ ᠪᠦᠲᠦᠴᠡ 6](#_Toc36970296)

[**ᠬᠤᠶᠠᠳᠤᠭᠠᠷ ᠪᠦᠯᠦᠭ** ᠬᠤᠯᠪᠤᠭᠳᠠᠯ ᠪᠦᠬᠦᠢ ᠮᠡᠷᠭᠡᠵᠢᠯ ᠵᠢᠴᠢ ᠴᠤᠭᠴᠠᠯᠠᠭᠰᠠᠨ ᠤᠷᠴᠢᠨ ᠲᠤᠭᠤᠷᠢᠨ 7](#_Toc36970297)

[2.1 Javaweb ᠬᠤᠯᠪᠤᠭᠳᠠᠯ ᠪᠦᠬᠦᠢ ᠮᠡᠷᠭᠡᠵᠢᠯ 7](#_Toc36970298)

[2.1.1 B/S ᠪᠦᠲᠦᠴᠡ 7](#_Toc36970299)

[2.1.2 Servlet ᠮᠡᠷᠭᠡᠵᠢᠯ 8](#_Toc36970300)

[2.1.3 ᠭᠤᠷᠪᠠᠨ ᠲᠠᠪᠬᠤᠷᠭᠠᠲᠤ ᠪᠦᠳᠤᠴᠡ 8](#_Toc36970301)

[2.2 ajax ᠮᠡᠷᠭᠡᠵᠢᠯ 9](#_Toc36970302)

[2.2.1 Html 10](#_Toc36970303)

[2.2.2 Javascript 10](#_Toc36970304)

[2.3  ᠳᠠᠢᠲ᠋ᠠ ᠶᠢᠨ ᠰᠠᠩ  ᠤᠨ ᠬᠤᠯᠪᠤᠭᠳᠠᠯ ᠪᠦᠬᠦᠢ ᠮᠡᠷᠭᠡᠵᠢᠯ  ᠤᠨ ᠲᠠᠢᠯᠪᠦᠷᠢᠯᠡᠯᠲᠡ 10](#_Toc36970305)

[2.3.1 C3p0 ᠵᠠᠯᠭᠠᠪᠦᠷᠢ 10](#_Toc36970306)

[2.3.2 Echarts  ᠳᠠᠢᠲ᠋ᠠ  ᠶᠢᠨ ᠦᠵᠡᠭᠳᠡᠬᠦᠢᠴᠡ 10](#_Toc36970307)

[2.4 ᠨᠡᠬᠡᠭᠡᠯᠲᠡ  ᠶᠢᠨ ᠤᠷᠴᠢᠨ ᠲᠤᠭᠤᠷᠢᠨ  ᠤ ᠲᠠᠢᠯᠪᠦᠷᠢᠯᠠᠯᠲᠠ 10](#_Toc36970308)

[2.5 ᠨᠡᠬᠡᠭᠡᠯᠲᠡ  ᠶᠢᠨ ᠤᠷᠴᠢᠨ ᠲᠤᠭᠤᠷᠢᠨ  ᠤ ᠵᠤᠬᠢᠶᠠᠨ ᠪᠠᠢᠭᠤᠯᠤᠯᠲᠠ 10](#_Toc36970309)

[2.5.1 JDK ᠤᠭᠰᠠᠷᠠᠬᠤ 10](#_Toc36970310)

[2.5.2 Tomcat ᠤᠭᠰᠠᠷᠠᠬᠤ 11](#_Toc36970311)

[2.5.3 Mysql ᠤᠭᠰᠠᠷᠠᠬᠤ 11](#_Toc36970312)

[2.5.4 IntelliJ IDEA ᠤᠭᠰᠠᠷᠠᠬᠤ 11](#_Toc36970313)

[2.5.5 IntelliJ IDEA ᠲᠦᠭᠦᠷᠵᠢᠭᠦᠯᠬᠦ 11](#_Toc36970314)

[2.5.6 ᠰᠦᠯᠵᠢᠶ᠎ᠡ  ᠶᠢᠨ ᠲᠦᠭᠦᠯᠳᠡᠷᠵᠢᠭᠦᠯᠦᠯᠲᠡ 11](#_Toc36970315)

[**ᠭᠤᠷᠪᠠᠳᠤᠭᠠᠷ ᠪᠦᠯᠦᠭ** ᠰᠢᠰᠲᠸᠮ  ᠤᠨ ᠶᠡᠷᠤᠨᠭᠬᠡᠢ ᠲᠦᠯᠦᠪᠯᠡᠯ 11](#_Toc36970316)

[3.1 ᠰᠢᠰᠲᠸᠮ  ᠤᠨ ᠬᠡᠷᠡᠭᠴᠡᠭᠡᠨ  ᠤ ᠵᠠᠳᠠᠯᠤᠯᠲᠠ 11](#_Toc36970317)

[3.2 ᠰᠢᠰᠲᠸᠮ  ᠤᠨ ᠲᠦᠰᠦᠪᠯᠡᠭᠰᠡᠨ ᠬᠠᠷᠠᠯᠲᠠ 11](#_Toc36970318)

[3.3.1 ᠵᠢᠱᠢᠶᠡᠲᠦ ᠵᠢᠷᠤᠭ 11](#_Toc36970319)

[3.3.2 ᠴᠠᠭ  ᠤᠨ ᠳᠠᠷᠠᠭᠠᠯᠠᠯ  ᠤᠨ ᠵᠢᠷᠤᠭ 11](#_Toc36970320)

[3.4 ᠶᠡᠷᠤᠨᠭᠬᠡᠢ ᠪᠦᠷᠢᠯᠳᠤᠴᠡ  ᠶᠢᠨ ᠲᠦᠰᠦᠪᠯᠡᠭᠡ 11](#_Toc36970321)

[3.5.1 ᠡᠩ  ᠤᠨ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢᠳ  ᠤᠨ ᠬᠡᠰᠡᠭ  ᠤᠨ ᠲᠦᠰᠦᠪᠯᠡᠭᠡ 12](#_Toc36970322)

[3.5.2 ᠬᠠᠮᠢᠶᠠᠷᠤᠭᠴᠢ  ᠤᠨ ᠬᠡᠰᠡᠭ  ᠤᠨ ᠲᠦᠰᠦᠪᠯᠡᠭᠡ 12](#_Toc36970323)

[3.5.3 ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢᠳ ᠤᠨ ᠰᠤᠷᠤᠯᠴᠠᠯᠭ᠎ᠠ  ᠶᠢᠨ ᠠᠵᠢᠯᠯᠠᠭ᠎ᠠ  ᠤᠨ ᠬᠠᠮᠢᠶᠠᠷᠤᠯᠲᠠ 12](#_Toc36970324)

[**ᠲᠦᠷᠪᠡᠳᠦᠭᠡᠷ ᠪᠦᠯᠦᠭ** ᠰᠢᠰᠲᠸᠮ  ᠤᠨ ᠨᠠᠷᠢᠨ ᠲᠦᠰᠦᠪᠯᠡᠭᠡ 12](#_Toc36970325)

[4.1  ᠳᠠᠢᠲ᠋ᠠ  ᠶᠢᠨ ᠬᠦᠮᠦᠷᠭᠡ  ᠶᠢᠨ ᠲᠦᠰᠦᠪᠯᠡᠭᠡ 12](#_Toc36970326)

[4.1.1 ᠳᠠᠢᠲ᠋ᠠ  ᠶᠢᠨ ᠬᠦᠮᠦᠷᠭᠡ  ᠶᠢᠨ ᠬᠦᠰᠦᠨᠦᠭ  ᠤᠨ ᠲᠦᠰᠦᠪᠯᠡᠭᠡ 12](#_Toc36970327)

[4.1.2 ᠬᠦᠰᠦᠨᠦᠭ ᠦᠨ ᠬᠠᠷᠢᠴᠠᠭᠠᠨ ᠤ ᠲᠥᠰᠦᠪᠯᠡᠯ 12](#_Toc36970328)

[4.2 ᠳᠠᠨᠭᠰᠠᠯᠠᠬᠤ ᠬᠢᠭᠡᠳ ᠨᠡᠪᠲᠡᠷᠡᠬᠦ 12](#_Toc36970329)

[4.3 ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢᠳ  ᠶᠢᠨ ᠰᠤᠷᠤᠯᠴᠠᠯᠭ᠎ᠠ  ᠶᠢᠨ ᠠᠵᠢᠯᠯᠭ᠎ᠠ  ᠶᠢᠨ ᠬᠠᠮᠢᠶᠠᠷᠤᠯᠲᠠ 12](#_Toc36970330)

[4.4 ᠬᠠᠮᠢᠶᠠᠷᠤᠭᠴᠢ 12](#_Toc36970331)

[ᠳᠦᠨᠭᠨᠡᠯᠲᠡ᠄ 12](#_Toc36970332)

[ᠯᠠᠪᠯᠠᠯᠲᠡ  ᠶᠢᠨ ᠰᠤᠷᠪᠤᠯᠵᠢ ᠪᠢᠴᠢᠭ᠄ 12](#_Toc36970333)

## ᠵᠢᠨᠭᠬᠢᠨᠢ ᠪᠢᠴᠢᠪᠦᠷᠢ᠄

## **ᠨᠢᠭᠡᠳᠤᠭᠡᠷ ᠪᠦᠯᠦᠭ** ᠤᠳᠤᠷᠢᠳᠬᠠᠯ᠄

### ᠰᠤᠳᠤᠯᠭᠠᠨ  ᠤ ᠤᠷᠴᠢᠨ ᠨᠦᠭᠦᠴᠡᠯ ᠂ ᠵᠤᠷᠢᠯᠭ᠎ᠠ ᠬᠢᠭᠡᠳ ᠠᠴᠢ ᠬᠤᠯᠪᠤᠭᠳᠠᠯ

ᠰᠤᠳᠤᠯᠭᠠᠨ  ᠤ ᠤᠷᠴᠢᠨ ᠨᠦᠭᠦᠴᠡᠯ ᠬᠢᠭᠡᠳ ᠠᠴᠢ ᠬᠤᠯᠪᠤᠭᠳᠠᠯ᠄

1. ᠤᠯᠠᠮᠵᠢᠯᠠᠯᠲᠤ ᠮᠣᠩᠭᠣᠯ ᠦᠰᠦᠭ ᠪᠣᠯ ᠳᠡᠯᠡᠬᠡᠶ ᠳᠡᠭᠡᠷᠡᠬᠢ ᠴᠣᠷ ᠤᠨ ᠭᠠᠭᠴᠠ ᠪᠣᠰᠣᠭ᠎ᠠ ᠪᠢᠴᠢᠳᠡᠭ ᠦᠰᠦᠭ ᠪᠣᠯᠤᠨ᠎ᠠ ᠃ ᠭᠡᠪᠡᠴᠦ ᠣᠯᠠᠨ ᠤᠯᠤᠰ ᠤᠨ ᠬᠣᠯᠪᠣᠭᠠᠲᠤ ᠪᠠᠶᠢᠭᠤᠯᠭ᠎ᠠ ᠶᠢᠨ ᠰᠤᠷᠭᠠᠨ ᠬᠥᠮᠦᠵᠢᠯ ᠰᠢᠨᠵᠢᠯᠡᠬᠦ ᠤᠬᠠᠭᠠᠨ ᠰᠣᠶᠣᠯ ᠤᠨ ᠵᠣᠬᠢᠶᠠᠨ ᠪᠠᠶᠢᠭᠤᠯᠤᠯᠲᠠ ᠶᠢᠨ ᠨᠡᠶᠢᠲᠡᠯᠡᠭᠰᠡᠨ ᠬᠠᠮᠤᠭ ᠤᠨ ᠰᠢᠨ᠎ᠡ ︽ ᠪᠥᠬᠥ ᠪᠥᠮᠪᠥᠷᠴᠡᠭ ᠦᠨ ᠮᠥᠬᠥᠬᠦ ᠰᠢᠬᠠᠭᠰᠠᠨ ᠬᠡᠯᠡᠨ ᠦ ᠭᠠᠵᠠᠷ ᠤᠨ ᠵᠢᠷᠤᠭ ︾ ᠲᠤ ᠤᠯᠠᠮᠵᠢᠯᠠᠯᠲᠤ ᠮᠣᠩᠭᠣᠯ ᠬᠡᠯᠡ ᠨᠢ ︽ ᠲᠤᠶᠢᠯ ᠤᠨ ᠮᠥᠬᠥᠬᠦ ᠰᠢᠬᠠᠭᠰᠠᠨ ᠬᠡᠯᠡ ︾ ᠪᠣᠯᠵᠠᠶ ᠃
2. ᠤᠢᠷ᠎ᠠ ᠤᠨ ᠬᠡᠳᠦᠨ ᠵᠢᠯ ᠂ ᠮᠤᠩᠭᠤᠯ ᠤᠯᠤᠰ᠎ ᠤᠨ ᠤᠯᠨᠮᠵᠢᠯᠠᠯᠲᠦ ᠮᠤᠩᠭᠤᠯ ᠬᠡᠯᠡ ᠵᠢ ᠬᠡᠷᠡᠭᠯᠡᠬᠦ ᠵᠢ ᠱᠠᠯᠠᠪᠳᠠᠨ ᠰᠡᠷᠭᠦᠭᠡᠭᠰᠡᠭᠡᠷ ᠢᠷᠡᠭᠰᠡᠨ ᠪᠤᠯᠪᠠᠴᠤ ᠤᠯᠠᠮᠵᠢᠯᠠᠯᠲᠦ ᠮᠤᠩᠭᠤᠯ ᠬᠡᠯᠡ ᠮᠡᠳᠡᠳᠡᠭ ᠬᠦᠮᠦᠨ ᠴᠦᠬᠡᠨ ᠪᠦᠭᠡᠳ ᠤᠯᠠᠮᠵᠢᠯᠠᠯᠲᠦ ᠮᠤᠩᠭᠤᠯ ᠬᠡᠯᠡ ᠰᠤᠷᠤᠯᠴᠠᠬᠤ ᠰᠢᠰ‍ᠲ᠋ᠸᠮ ᠲᠠᠢ ᠰᠦᠯᠵᠢᠶ᠎ᠡ ᠪᠠᠰᠠ ᠪᠠᠢᠬᠤ ᠦᠭᠡᠢ᠃ ᠤᠯᠠᠮᠵᠢᠯᠠᠲᠦ ᠮᠤᠩᠭᠤᠯ ᠦᠭᠡ ᠬᠡᠯᠡ ᠦᠰᠦᠭ ᠪᠢᠴᠢᠭ ᠮᠤᠩᠭᠤᠯ ᠦᠨᠳᠦᠰᠦᠲᠡᠨ  ᠎᠎ ᠤ ᠰᠤᠶᠤᠯ᠎  ᠤᠨ ᠦᠪ ᠬᠦᠷᠦᠩᠭᠡ ᠪᠤᠯᠤᠭᠰᠠᠨ ᠎᠎ ᠤ ᠬᠤᠪᠢ ᠎ ᠳᠦ ᠂ ᠬᠤᠶᠠᠷ ᠤᠯᠤᠰ  ᠤᠨ《ᠨᠢᠭᠡ ᠪᠦᠰᠡ ᠨᠢᠭᠡ ᠵᠠᠮ 》᠎ ᠤᠨ ᠤᠯᠤᠰ ᠲᠦᠷᠦ᠂ ᠠᠵᠤ ᠠᠬᠤᠢ᠂ ᠠᠮᠢ ᠠᠬᠤᠢ  ᠶᠢᠨ ᠰᠢᠰ‍ᠲ᠋ᠸᠮ ᠵᠢ ᠬᠠᠮᠲᠦ ᠪᠡᠷ ᠪᠠᠢᠭᠤᠯᠬᠤ  ᠶᠢᠨ ᠴᠢᠬᠤᠯᠠ ᠰᠠᠭᠤᠷᠢ ᠪᠤᠯᠵᠠᠢ᠃
3. ᠥᠪᠡᠷᠲᠡᠭᠡᠨ ᠵᠣᠬᠢᠴᠠᠵᠤ ᠰᠤᠷᠤᠯᠴᠠᠬᠤ ᠮᠡᠷᠭᠡᠵᠢᠯ ᠨᠢ ᠤᠢᠢᠷ᠎ᠠ ᠶᠢᠨ ᠵᠢᠯ ᠦᠨ ᠰᠤᠷᠭᠠᠨ ᠬᠥᠮᠦᠵᠢᠯ ᠦᠨ ᠬᠦᠷᠢᠶᠡᠨ ᠳᠡᠬᠢ ᠰᠤᠳᠤᠯᠭᠠᠨ ᠤ ᠬᠠᠯᠠᠭᠤᠨ ᠴᠡᠭ ᠪᠣᠯᠤᠭᠰᠠᠨ ᠤ ᠬᠤᠪᠢ ᠳᠤ᠂ ᠰᠤᠷᠤᠯᠴᠠᠯᠭ᠎ᠠ ᠶᠢᠨ ᠦᠷ᠎ᠡ ᠪᠦᠲᠦᠭᠡᠯ ᠢ ᠳᠡᠭᠡᠭᠰᠢᠯᠡᠭᠦᠯᠬᠦ ᠲᠠᠯ᠎ᠠ ᠪᠠᠷ ᠶᠡᠬᠡ ᠦᠢᠯᠡᠰ ᠪᠦᠲᠦᠭᠡᠵᠦ ᠪᠣᠯᠤᠨ᠎ᠠ᠃

ᠰᠤᠳᠤᠯᠭᠠᠨ  ᠤ ᠵᠤᠷᠢᠯᠭ᠎ᠠ ᠄

ᠰᠤᠳᠤᠯᠭᠠᠨ ᠤ ᠵᠤᠷᠢᠯᠭ᠎ᠠ ᠪᠣᠯ ᠬᠡᠷᠡᠭᠯᠡᠬᠦ ᠳᠦ ᠳᠥᠭᠥᠮ ᠠᠪᠰᠠᠷᠬᠠᠨ ᠮᠣᠩᠭᠣᠯ ᠬᠡᠯᠡᠨ ᠦ  ᠳᠠᠩ ᠦᠭᠡ   ᠶᠢ ᠵᠢᠷᠤᠵᠤ ᠲᠥᠯᠥᠪᠯᠡᠨ ᠭᠠᠷᠭᠠᠵᠤ ᠰᠤᠷᠤᠯᠴᠠᠬᠤ ᠰᠢᠰᠲᠸᠮ ᠳᠦ ᠵᠣᠬᠢᠴᠠᠭᠤᠯᠤᠭᠰᠠᠨ ᠪᠥᠭᠡᠳ ᠣᠳᠣᠬᠢᠴᠢᠯᠠᠭᠰᠠᠨ ᠮᠡᠷᠭᠡᠵᠢᠯ ᠢ ᠮᠣᠩᠭᠣᠯ ᠬᠡᠯᠡᠨ ᠦ ᠰᠤᠷᠤᠯᠴᠠᠯᠭ᠎ᠠ ᠳᠤ ᠬᠡᠷᠡᠭᠯᠡᠵᠦ᠂ ᠨᠢᠭᠡᠨᠲᠡ ᠺᠢᠷᠢᠯ ᠮᠣᠩᠭᠣᠯ ᠬᠡᠯᠡ ᠶᠢ ᠡᠵᠡᠮᠰᠢᠭᠡᠳ᠂ ᠤᠯᠠᠮᠵᠢᠯᠠᠯᠲᠤ ᠮᠣᠩᠭᠣᠯ ᠬᠡᠯᠡ ᠰᠤᠷᠬᠤ ᠶᠢ ᠰᠠᠨᠠᠭᠰᠠᠳ ᠲᠤ ᠳᠥᠭᠥᠮ ᠳᠦᠳᠡ ᠠᠪᠴᠢᠷᠠᠬᠤ  ᠶᠢᠨ ᠲᠤᠰᠠᠲᠠ᠃ 2012 ᠣᠨ ᠤ ᠬᠡᠪᠯᠡᠯ ᠦᠨ ᠪᠠᠭ᠎ᠠ ᠰᠤᠷᠭᠠᠭᠤᠯᠢ ᠶᠢᠨ ᠮᠣᠩᠭᠣᠯ ᠵᠢᠭᠠᠬᠤ ᠮᠠᠲ᠋ᠧᠷᠢᠶᠠᠯ ᠤᠨ 264 ᠬᠢᠴᠢᠶᠡᠯ ᠦᠨ ᠳᠣᠲᠣᠷᠠᠬᠢ 4000 ᠪᠠᠶᠢᠩᠭᠤ ᠬᠡᠷᠡᠭᠯᠡᠭᠳᠡᠬᠦ ᠦᠭᠡᠰ ᠦᠨ ᠰᠠᠩ ᠢᠶᠠᠷ ᠳ᠋ᠠᠶᠢᠲ᠋ᠠ  ᠶᠢᠨ ᠬᠥᠮᠥᠷᠭᠡ ᠪᠣᠯᠭᠠᠪᠠ᠃ ᠬᠠᠮᠤᠭ ᠡᠴᠦᠰ ᠦᠨ ᠬᠠᠷᠠᠯᠲᠠ ᠪᠣᠯ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢᠳ ᠤᠯᠠᠮᠵᠢᠯᠠᠯᠲᠤ ᠮᠣᠩᠭᠣᠯ ᠬᠡᠯᠡ ᠶᠢ ᠣᠯᠵᠤ ᠦᠵᠡᠬᠦ ᠳᠡᠭᠡᠨ ᠤᠩᠰᠢᠵᠤ᠂ ᠺᠢᠷᠢᠯ ᠮᠣᠩᠭᠣᠯ ᠬᠡᠯᠡ ᠶᠢ ᠣᠯᠵᠤ ᠦᠵᠡᠬᠦ ᠳᠡᠭᠡᠨ ᠬᠠᠷᠠᠭᠠᠯᠵᠠᠭᠰᠠᠨ ᠤᠯᠠᠮᠵᠢᠯᠠᠯᠲᠤ ᠮᠣᠩᠭᠣᠯ ᠬᠡᠯᠡ ᠶᠢ ᠠᠯᠢ ᠴᠢᠳᠠᠬᠤ ᠪᠠᠷ ᠵᠥᠪ ᠣᠨᠣᠪᠴᠢᠲᠠᠶ ᠪᠢᠴᠢᠵᠦ ᠭᠠᠷᠭᠠᠬᠤ ᠶᠠᠪᠤᠳᠠᠯ ᠪᠣᠯᠤᠨ᠎ᠠ᠃ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢᠳ ᠥᠪᠡᠷ ᠦᠨ ᠬᠡᠷᠡᠭᠴᠡᠭᠡ ᠪᠠᠨ ᠦᠨᠳᠦᠰᠦᠯᠡᠨ ᠠᠳᠠᠯᠢ ᠪᠤᠰᠤ ᠵᠡᠷᠭᠡ ᠳᠡᠰ ᠢᠶᠠᠨ ᠰᠣᠩᠭᠣᠵᠤ᠂ ᠺᠢᠷᠢᠯ ᠣᠩᠭᠣᠯ ᠦᠰᠦᠭ ᠲᠡᠶ ᠬᠠᠷᠠᠭᠠᠯᠵᠠᠭᠰᠠᠨ ᠤᠯᠠᠮᠵᠢᠯᠠᠯᠲᠤ ᠮᠣᠩᠭᠣᠯ ᠬᠡᠯᠡ ᠶᠢ ᠰᠤᠷᠤᠯᠴᠠᠬᠤ ᠶᠢᠨ ᠬᠠᠮᠲᠤ ᠪᠢᠴᠢᠬᠦ ᠠᠷᠭ᠎ᠠ ᠪᠠᠨ ᠠᠪᠴᠤ᠂ ᠳᠠᠬᠢᠨ ᠰᠣᠩᠭᠣᠬᠤ ᠰᠡᠳᠦᠪ ᠬᠢᠬᠦ ᠪᠡᠷ ᠳᠠᠮᠵᠢᠨ ᠴᠠᠭ ᠲᠤᠬᠠᠢ ᠳᠤᠨᠢ ᠳᠠᠪᠲᠠᠨ ᠪᠠᠲᠤᠳᠬᠠᠨ᠎ᠠ᠃ ᠺᠢᠷᠢᠯ ᠥᠰᠥᠭ ᠦᠨ ᠲᠢᠭ ᠪᠠ ᠤᠯᠠᠮᠵᠢᠯᠠᠯᠲᠤ ᠮᠣᠩᠭᠣᠯ ᠥᠰᠥᠭ ᠦᠨ ᠲᠢᠭ ᠦᠨ ᠬᠠᠷᠢᠯᠴᠠᠨ ᠰᠣᠯᠢᠭᠳᠠᠬᠤ ᠬᠠᠷᠰᠢ ᠰᠠᠭᠠᠳ ᠢ ᠰᠢᠶᠳᠪᠦᠷᠢᠯᠡᠨ᠎ᠡ ᠃

### ᠤᠳᠤᠬᠢ ᠤᠯᠤᠰ  ᠤᠨ ᠭᠠᠳᠠᠭᠠᠲᠤ ᠲᠤᠲᠤᠭᠠᠲᠤ  ᠳᠡᠬᠢ ᠬᠦᠭᠵᠢᠯᠲᠡ  ᠶᠢᠨ ᠪᠠᠢᠳᠠᠯ

ᠲᠤᠤᠷ ᠰᠦᠯᠵᠢᠢ᠎ᠡ ᠶᠢᠨ ᠬᠥᠨᠳᠡᠯᠡᠨ ᠭᠤᠯᠳᠤ ᠬᠥᠭᠵᠢᠯᠲᠡ ᠶᠢ ᠲᠠᠭᠠᠯᠳᠤᠨ᠂ ᠠᠯᠬᠤᠮ ᠠᠯᠬᠤᠮ ᠢᠶᠠᠷ ᠨᠢᠭᠡ ᠵᠦᠢᠯ ᠦ ᠴᠠᠭ ᠤᠨ ᠤᠷᠤᠰᠬᠠᠯ ᠢ ᠳᠠᠭᠠᠭᠰᠠᠨ ᠠᠮᠢᠳᠤᠷᠠᠯ ᠤᠨ ᠠᠷᠭ᠎ᠠ ᠬᠡᠯᠪᠡᠷᠢ ᠪᠤᠯᠵᠤ᠂ ᠬᠥᠮᠦᠰ ᠦᠨ ᠠᠮᠢᠳᠤᠷᠠᠯ ᠢ ᠨᠥᠯᠥᠭᠡᠯᠡᠵᠦ ᠪᠠᠶᠢᠨ᠎ᠠ᠂ ᠡᠨᠡ ᠬᠦ ᠠᠬᠤᠢ ᠪᠠᠶᠢᠳᠠᠯ ᠳᠣᠣᠷ᠎ᠠ ᠠᠶᠠᠨᠳᠠᠭᠠᠨ ᠪᠤᠢ ᠪᠤᠯᠵᠤ᠂ ᠰᠦᠯᠵᠢᠶᠡᠨ ᠳᠡᠭᠡᠷ᠎ᠡ ᠤᠯᠠᠮᠵᠢᠯᠠᠯᠲᠤ ᠮᠣᠩᠭᠣᠯ ᠬᠡᠯᠡ ᠰᠤᠷᠬᠤ ᠳᠤ ᠬᠥᠮᠦᠰ ᠲᠠᠬᠢᠨ ᠶᠡᠬᠡ ᠦᠨ᠎ᠡ ᠬᠠᠨᠭᠰᠢ ᠪᠡᠷ ᠨᠣᠮ ᠪᠢᠴᠢᠭ ᠬᠤᠳᠠᠯᠳᠤᠨ ᠠᠪᠬᠤ ᠴᠢᠬᠤᠯᠠ ᠦᠭᠡᠢ᠂ ᠤᠯᠠᠮᠵᠢᠯᠠᠯᠲᠤ ᠮᠣᠩᠭᠣᠯ ᠬᠡᠯᠡ ᠰᠤᠷᠬᠤ ᠪᠣᠯᠪᠠᠰᠤᠷᠠᠯ ᠤᠨ ᠠᠨᠭᠬᠢ ᠳᠤ ᠣᠷᠣᠬᠤ ᠴᠢᠬᠤᠯᠠ ᠦᠭᠡᠢ᠂ ᠬᠤᠪᠢ ᠪᠠᠷ ᠢᠶᠠᠨ ᠵᠢᠭᠠᠨ ᠰᠤᠷᠭᠠᠬᠤ ᠵᠡᠷᠭᠡ ᠪᠣᠯᠤᠨ᠎ᠠ᠃ ᠰᠦᠯᠵᠢᠶᠡᠨ ᠳᠡᠭᠡᠷ᠎ᠡ ᠤᠯᠠᠮᠵᠢᠯᠠᠯᠲᠤ ᠮᠣᠩᠭᠣᠯ ᠬᠡᠯᠡ ᠰᠤᠷᠪᠠᠯ ᠺᠢᠷᠢᠯ ᠦᠰᠦᠭ ᠪᠢᠴᠢᠭ ᠮᠡᠳᠡᠳᠡᠭ ᠬᠥᠮᠦᠰ ᠲᠦ ᠤᠯᠠᠮᠵᠢᠯᠠᠯᠲᠤ ᠮᠣᠩᠭᠣᠯ ᠦᠰᠦᠭ ᠪᠢᠴᠢᠭ ᠦᠨ ᠷᠢᠳᠢ ᠰᠢᠳᠢ ᠶᠢ ᠨᠡᠩ ᠰᠠᠢᠢᠨ ᠣᠶᠢᠯᠠᠭᠠᠭᠤᠯᠵᠤ ᠴᠢᠳᠠᠨ᠎ᠠ᠃

ᠭᠠᠳᠠᠭᠠᠳᠤ ᠤᠯᠤᠰ ᠤᠨ ᠬᠥᠭᠵᠢᠯᠲᠡ ᠶᠢᠨ ᠪᠠᠶᠢᠳᠠᠯ ᠄ ᠣᠳᠣᠬᠠᠨ ᠳᠤ ᠵᠥᠪᠬᠡᠨ ᠮᠣᠩᠭᠣᠯ ᠤᠯᠤᠰ ᠺᠢᠷᠢᠯ ᠥᠰᠥᠭ ᠬᠡᠷᠡᠭᠯᠡᠵᠦ ᠪᠠᠶᠢᠬᠤ ᠪᠥᠭᠡᠳ ᠮᠣᠩᠭᠣᠯ ᠤᠯᠤᠰ ᠤᠯᠠᠮᠵᠢᠯᠠᠯᠲᠤ ᠮᠣᠩᠭᠣᠯ ᠥᠰᠥᠭ ᠵᠢ ᠰᠠᠶ᠋ᠢ ᠡᠬᠢᠯᠡᠭᠡᠳ ᠰᠡᠷᠭᠦᠭᠡᠵᠦ ᠪᠠᠢᠭ᠎ᠠ ᠪᠤᠯᠬᠤᠷ ᠂ ᠲᠠᠳᠠ ᠤᠯᠠᠮᠵᠢᠯᠠᠯᠲᠤ ᠮᠣᠩᠭᠣᠯ ᠥᠰᠥᠭ ᠪᠢᠴᠢᠭ ᠰᠤᠷᠬᠤ ᠰᠠᠨᠠᠭ᠎ᠠ ᠲᠠᠶ ᠪᠣᠯᠪᠠᠴᠤ ᠣᠳᠣᠬᠠᠨ ᠳᠤ ᠡᠨᠡ ᠬᠦ ᠴᠢᠭᠯᠡᠯ ᠦᠨ ᠰᠤᠳᠤᠯᠭᠠᠨ ᠲᠦᠭᠡᠮᠡᠯᠵᠢᠭᠡᠳᠦᠢ ᠂ ᠰᠦᠯᠵᠢᠶᠡᠨ ᠳᠡᠭᠡᠷ᠎ᠡ ᠤᠯᠠᠮᠵᠢᠯᠠᠯᠲᠤ ᠮᠣᠩᠭᠣᠯ ᠥᠰᠥᠭ ᠪᠢᠴᠢᠭ ᠰᠤᠷᠬᠤ ᠰᠢᠰᠲᠸᠮ ᠪᠠᠢᠭᠰᠠᠨ ᠴᠦ ᠲᠡᠳᠡᠭᠡᠷ  ᠤᠨ ᠬᠠᠨᠳᠤᠭᠤᠯᠤᠭᠰᠠᠨ ᠡᠲᠡᠭᠡᠳ ᠪᠤᠯ ᠬᠢᠲᠠᠳ ᠬᠡᠯᠡ ᠬᠡᠷᠡᠭᠯᠡᠳᠡᠭ ᠬᠥᠮᠦᠰ ᠲᠦ ᠪᠤᠯᠤᠨ᠎ᠠ ᠃

ᠤᠯᠤᠰ ᠤᠨ ᠳᠣᠲᠣᠭᠠᠳᠤ ᠶᠢᠨ ᠬᠥᠭᠵᠢᠯ ᠦᠨ ᠪᠠᠶᠢᠳᠠᠯ᠄ ᠤᠯᠤᠰ  ᠤᠨ ᠳᠤᠲᠤᠭᠠᠲᠤ ᠲᠦ ᠵᠦᠪᠭᠡᠨ ᠴᠦᠬᠡᠨ ᠲᠤᠭᠠᠲᠤ ᠦᠨᠳᠦᠰᠦᠲᠡᠨ  ᠤ ᠤᠷᠤᠨ  ᠳᠦ ᠤᠯᠠᠮᠵᠢᠯᠠᠯᠲᠦ ᠮᠤᠩᠭᠤᠯ ᠬᠡᠯᠡ  ᠶᠢᠨ ᠰᠤᠳᠤᠯᠭᠠᠨ ᠬᠢᠵᠦ ᠪᠠᠢᠳᠠᠭ ᠂ ᠡᠭᠦᠨ  ᠳᠦ ᠦᠪᠡᠷ ᠮᠤᠩᠭᠤᠯ  ᠳᠦ ᠺᠢᠷᠢᠯ ᠮᠤᠩᠭᠤᠯ ᠬᠡᠯᠡ ᠪᠣᠯᠤᠨ ᠤᠯᠠᠮᠵᠢᠯᠠᠯᠲᠤ ᠮᠣᠩᠭᠣᠯ ᠬᠡᠯᠡ  ᠤ ᠬᠠᠮᠢᠶ᠎ᠠ ᠲᠠᠢ ᠰᠤᠳᠤᠯᠭᠠᠨ ᠤᠯᠠᠨ ᠪᠠᠶᠢᠨ᠎ᠠ᠃

### ᠰᠤᠳᠤᠯᠭᠠᠨ  ᠤ ᠠᠭᠤᠯᠭ᠎ᠠ

ᠰᠤᠷᠤᠯᠴᠠᠭᠴᠢ ᠵᠢ ᠦᠪᠡᠷᠮᠢᠴᠡ ᠴᠢᠨᠠᠷᠲᠦ ᠦᠨᠳᠦᠷ ᠠᠰᠢᠭᠯᠠᠮᠵᠢᠲᠠᠢ ᠪᠡᠷ ᠰᠤᠷᠤᠯᠴᠠᠭᠤᠯᠵᠤ ᠂ ᠺᠢᠷᠢᠯ ᠦᠰᠦᠭ  ᠤᠨ ᠳᠠᠩ ᠦᠭᠡ ᠂ ᠦᠭᠡᠰ ᠵᠢ ᠤᠯᠠᠮᠵᠢᠯᠠᠯᠲᠦ ᠮᠤᠩᠭᠤᠯ ᠦᠰᠦᠭ  ᠤᠨ ᠤᠨᠭᠰᠢᠯᠭ᠎ᠠ᠂ ᠳᠠᠭᠤᠳᠠᠯᠭ᠎ᠠ ᠂ ᠳᠠᠩ ᠦᠭᠡ ᠬᠢᠭᠡᠳ ᠦᠭᠡᠰ ᠲᠠᠢ ᠨᠢ ᠬᠠᠷᠠᠭᠠᠯᠵᠠᠭᠤᠯᠵᠤ ᠂ ᠪᠤᠯᠪᠠᠰᠤᠷᠠᠯ  ᠤᠨ ᠰᠡᠳᠦᠪ ᠬᠢᠬᠦ ᠪᠡᠷ ᠳᠠᠮᠵᠢᠨ ᠪᠠᠲᠤᠳᠬᠠᠨ᠎ᠠ᠃

### ᠲᠤᠰ ᠦᠭᠦᠯᠡᠯ  ᠤᠨ ᠵᠤᠬᠢᠶᠠᠨ ᠪᠠᠢᠭᠤᠯᠤᠯᠲᠠ ᠬᠢᠭᠡᠳ ᠪᠦᠲᠦᠴᠡ

## **ᠬᠤᠶᠠᠳᠤᠭᠠᠷ ᠪᠦᠯᠦᠭ** ᠬᠤᠯᠪᠤᠭᠳᠠᠯ ᠪᠦᠬᠦᠢ ᠮᠡᠷᠭᠡᠵᠢᠯ ᠵᠢᠴᠢ ᠴᠤᠭᠴᠠᠯᠠᠭᠰᠠᠨ ᠤᠷᠴᠢᠨ ᠲᠤᠭᠤᠷᠢᠨ

### Javaweb ᠬᠤᠯᠪᠤᠭᠳᠠᠯ ᠪᠦᠬᠦᠢ ᠮᠡᠷᠭᠡᠵᠢᠯ

#### B/S ᠵᠠᠭᠪᠤᠷ

B/S ᠵᠠᠭᠪᠤᠷ ᠶᠢ ᠪᠦᠬᠦᠯᠢ ᠳᠦᠨᠢ Browsers/Server ᠭᠡᠳᠡᠭ᠂ ᠳᠠᠷᠤᠢ ᠬᠦᠲᠦᠴᠢ/ ᠦᠢᠯᠡᠴᠢᠯᠡᠭᠦᠷ  ᠦᠨ ᠪᠦᠲᠦᠴᠡ ᠪᠣᠯᠤᠨ᠎ᠠ᠃ ᠲᠡᠭᠦᠨ ᠦ ᠳᠣᠲᠣᠷ᠎ᠠ Browsers ᠪᠤᠯ ᠰᠢᠰᠲ᠋ᠧᠮ ᠦᠨ ᠰᠤᠷᠪᠤᠯᠵᠢᠯᠠᠭᠰᠠᠨ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢ ᠶᠢᠨ ᠦᠵᠦᠭᠦᠷ ᠦᠨ ᠫᠷᠤᠭ᠍ᠷᠠᠮ ᠮᠥᠨ ᠂ ᠳᠠᠷᠤᠶ ᠰᠦᠯᠵᠢᠶᠡᠨ ᠬᠠᠭᠤᠳᠠᠰ ᠤᠨ ᠬᠦᠲᠦᠴᠢ ᠂ ᠬᠦᠲᠦᠴᠢ   ᠶᠢᠨ ᠦᠵᠦᠭᠦᠷ ᠲᠦ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢᠳ ᠢ ᠰᠢᠶᠳᠪᠦᠷᠢᠯᠡᠬᠦ ᠨᠢ ᠮᠠᠰᠢ ᠴᠥᠭᠡᠨ ᠂ ᠣᠯᠠᠩᠬᠢ ᠲᠣᠭᠠᠨ ᠤ ᠡᠮᠦᠨ᠎ᠡ ᠲᠠᠪᠴᠠᠩ  ᠤᠨ ᠰᠢᠶᠳᠪᠦᠷᠢᠯᠡᠯᠲᠡ ᠨᠢ ᠭᠣᠣᠯᠳᠠᠭᠤ ᠦᠢᠯᠡᠴᠢᠯᠡᠭᠦᠷ ᠳᠡᠭᠡᠷ᠎ᠡ ᠪᠡᠶᠡᠯᠡᠭᠦᠯᠳᠡᠭ ᠃ ᠬᠦᠲᠦᠴᠢ ᠤᠨ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢ ᠶᠢᠨ ᠦᠵᠦᠭᠦᠷ ᠂ Web ᠦᠶᠯᠡᠴᠢᠯᠡᠭᠡᠨ ᠦ ᠮᠠᠰᠢᠨ ᠵᠢᠴᠢ ᠳ᠋ᠠᠶᠢᠲ᠋ᠠ ᠶᠢᠨ ᠬᠥᠮᠥᠷᠭᠡ ᠶᠢᠨ ᠦᠵᠦᠭᠦᠷ ᠨᠢ ᠭᠤᠷᠪᠠᠨ ᠳᠠᠪᠬᠤᠷ ᠪᠣᠷᠣ ᠲᠥᠯᠥᠪ ᠪᠦᠷᠢᠯᠳᠦᠵᠡᠶ ᠂ ᠡᠶᠢᠮᠦᠷᠬᠦᠸ ᠪᠦᠲᠦᠴᠡ ᠶᠢᠨ ᠰᠢᠰᠲ᠋ᠧᠮ ᠨᠢ ᠣᠨᠴᠠᠭᠠᠢ ᠤᠭᠰᠠᠷᠠᠬᠤ ᠴᠢᠬᠤᠯᠠ ᠦᠭᠡᠢ ᠂ ᠵᠥᠪᠬᠡᠨ Web ᠬᠠᠢᠭᠤᠷ ᠪᠠᠶᠪᠠᠯ ᠪᠣᠯᠴᠢᠬᠠᠨ᠎ᠠ 〔8〕 ᠃ B/S ᠡᠨᠡ ᠬᠦ ᠰᠦᠯᠵᠢᠶᠡᠨ ᠦ ᠬᠡᠷᠡᠭᠯᠡᠭᠡᠨ ᠦ ᠪᠦᠲᠦᠴᠡ ᠳᠡᠬᠢ ᠭᠣᠣᠯ ᠠᠵᠢᠯᠯᠠᠬᠤ ᠯᠣᠭᠢᠭ ᠨᠢᠭᠤᠷ ᠨᠢ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢ ᠶᠢᠨ ᠦᠵᠦᠭᠦᠷ ᠦᠨ ᠬᠠᠢᠭᠤᠷ ᠳᠡᠭᠡᠷ᠎ᠡ ᠲᠠᠯᠪᠢᠵᠤ ᠂ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢ ᠶᠢᠨ ᠠᠵᠢᠯ ᠶᠢᠨ ᠰᠢᠶᠳᠪᠦᠷᠢᠯᠡᠯᠲᠡ ᠶᠢ ᠬᠤᠢᠨ᠎ᠠ ᠲᠠᠪᠴᠠᠩ ᠳᠤ ᠲᠤᠰᠢᠶᠠᠵᠤ ᠰᠢᠶᠳᠪᠦᠷᠢᠯᠡᠨ᠎ᠡ ᠂ ᠢᠨᠭᠬᠢᠭᠰᠡᠨ ᠡᠴᠡ ᠪᠣᠯᠤᠭᠰᠠᠨ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢ ᠶᠢᠨ ᠦᠵᠦᠭᠦᠷ ᠡᠴᠡ ᠠᠪᠴᠢᠷᠠᠭᠰᠠᠨ ᠠᠴᠢᠶ᠎ᠠ ᠵᠢ ᠶᠡᠭᠡ ᠬᠡᠪᠴᠢᠶ᠎ᠡ ᠪᠡᠷ ᠪᠠᠭᠠᠰᠬᠠᠭᠰᠠᠨ ᠪᠠᠶᠢᠨ᠎ᠠ ᠃ ᠡᠨᠡ ᠨᠢ Client/Server ᠪᠦᠲᠦᠴᠡ ᠲᠡᠶ ᠮᠠᠰᠢ ᠶᠡᠬᠡ ᠢᠯᠭᠠᠭ᠎ᠠ 〔9〕᠃ ᠪᠤᠰᠤᠳ ᠰᠤᠷᠤᠯᠴᠠᠬᠤ ᠲᠤᠨᠤᠭ  ᠲᠠᠢ ᠬᠠᠷᠢᠴᠠᠭᠤᠯᠪᠠᠯ᠂ ᠲᠤᠰ ᠬᠠᠮᠢᠶᠠᠷᠤᠯᠲᠠ ᠶᠢᠨ ᠰᠢᠰᠲ᠋ᠧᠮ ᠦᠨ ᠬᠡᠷᠡᠭᠯᠡᠬᠦ B/S ᠰᠦᠯᠵᠢᠶᠡᠨ ᠦ ᠬᠡᠷᠡᠭᠯᠡᠭᠡᠨ ᠦ ᠫᠷᠤᠭ᠍ᠷᠠᠮ ᠤᠨ ᠪᠦᠲᠦᠴᠡ ᠮᠠᠰᠢ ᠣᠯᠠᠨ ᠳᠠᠪᠠᠭᠤᠯᠢᠭ ᠲᠠᠯ᠎ᠠ ᠲᠠᠶ ᠄ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢ ᠶᠢᠨ ᠦᠵᠦᠭᠦᠷ ᠢ ᠤᠭᠰᠠᠷᠠᠬᠤ ᠴᠢᠬᠤᠯᠠ ᠥᠬᠡᠶ ᠂ ᠵᠥᠪᠬᠡᠨ Web ᠬᠠᠢᠭᠤᠷ ᠪᠠᠶᠪᠠᠯ ᠪᠣᠯᠴᠢᠬᠠᠨ᠎ᠠ ᠃ ᠬᠡᠷᠡᠭᠯᠡᠭᠡᠨ ᠦ ᠬᠠᠶᠢᠭᠤᠷ / ᠦᠢᠯᠡᠴᠢᠯᠡᠭᠦᠷ ᠰᠦᠯᠵᠢᠶᠡᠨ ᠦ ᠬᠡᠷᠡᠭᠯᠡᠭᠡᠨ ᠦ ᠫᠷᠤᠭ᠍ᠷᠠᠮ ᠤᠨ ᠪᠦᠲᠦᠴᠡ ᠂ ᠲᠡᠭᠦᠨ ᠢ ᠢᠨᠲ᠋ᠧᠷᠨᠧᠲ ᠲᠦ ᠤᠭᠰᠠᠷᠠᠵᠤ ᠪᠣᠯᠤᠨ᠎ᠠ ᠂ ᠢᠩᠭᠢᠪᠡᠯ ᠣᠯᠠᠨ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢ ᠶᠢ ᠰᠤᠷᠪᠤᠯᠵᠢᠯᠠᠭᠤᠯᠵᠤ ᠪᠣᠯᠬᠤ ᠮᠥᠷᠲᠡᠭᠡᠨ ᠵᠣᠬᠢᠬᠤ ᠬᠢᠵᠠᠭᠠᠷᠯᠠᠯ ᠢᠶᠠᠷ ᠳᠠᠮᠵᠢᠭᠤᠯᠤᠨ ᠴᠢᠳᠠᠮᠵᠢ ᠶᠢᠨ ᠤᠯᠠᠨ ᠶᠠᠩᠵᠤᠲᠤ ᠴᠢᠨᠠᠷ ᠢ ᠪᠡᠶᠡᠯᠡᠭᠦᠯᠵᠦ ᠴᠢᠳᠠᠨ᠎ᠠ᠂ ᠲᠡᠭᠦᠨ ᠦ ᠰᠡᠯᠭᠦᠭᠡ ᠴᠢᠨᠠᠷ ᠨᠢ ᠣᠨᠴᠠᠭᠠᠶ ᠴᠢᠩᠭ᠎ᠠ ᠪᠠᠶᠢᠳᠠᠭ᠃ ᠰᠢᠰᠲ᠋ᠧᠮ ᠦᠨ ᠳᠡᠰ ᠳᠡᠪᠰᠢᠬᠦ ᠳᠦ ᠬᠠᠢᠭᠤᠷ ᠤ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢ ᠶᠢᠨ ᠦᠵᠦᠭᠦᠷ ᠢ ᠳᠡᠰ ᠳᠡᠪᠰᠢᠭᠦᠯᠬᠦ ᠴᠢᠬᠤᠯᠠ ᠦᠭᠡᠢ ᠂ Web ᠦᠢᠯᠡᠴᠢᠯᠡᠭᠦᠷ  ᠦᠨ ᠦᠵᠦᠭᠦᠷ ᠢ ᠳᠡᠰ ᠳᠡᠪᠰᠢᠭᠦᠯᠪᠡᠯ ᠪᠣᠯᠴᠢᠬᠠᠨ᠎ᠠ ᠃

#### Servlet ᠮᠡᠷᠭᠡᠵᠢᠯ

Servlet ᠪᠣᠯ Java ᠫᠷᠤᠭ᠍ᠷᠠᠮ ᠪᠣᠯᠤᠨ᠎ᠠ᠂ ᠦᠶᠯᠡᠴᠢᠯᠡᠬᠦ ᠮᠠᠰᠢᠨ ᠤ ᠦᠵᠦᠭᠦᠷ ᠲᠦ ᠠᠵᠢᠯᠯᠠᠵᠤ ᠂ ᠲᠡᠭᠦᠨ ᠦ ᠡᠭᠦᠷᠭᠡᠯᠡᠵᠦ ᠪᠠᠶᠭ᠎ᠠ ᠳᠦᠷᠢ ᠪᠤᠯ ᠨᠢᠭᠡᠨ ᠵᠠᠪᠰᠠᠷ ᠣᠨ ᠳᠠᠪᠬᠤᠷᠭ᠎ᠠ ᠪᠤᠯᠤᠨ᠎ᠠ ᠂ ᠭᠣᠸᠯᠳᠠᠭᠤ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢ ᠶᠢᠨ ᠦᠵᠦᠭᠦᠷ ᠦᠨ ᠭᠤᠶᠤᠴᠢᠯᠠᠯ ᠢ ᠰᠢᠶᠳᠪᠦᠷᠢᠯᠡᠬᠦ ᠶᠢᠨ ᠬᠠᠮᠲᠤ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢ ᠶᠢᠨ ᠦᠵᠦᠭᠦᠷ ᠦᠨ ᠭᠤᠶᠤᠴᠢᠯᠠᠯ ᠢ ᠳᠠᠭᠠᠨ᠎ᠠ᠃ ᠡᠭᠦᠨ ᠡᠴᠡ ᠭᠠᠳᠠᠨ᠎ᠠ᠂ ᠲᠡᠷᠡ ᠨᠢ ᠪᠠᠰᠠ ᠬᠡᠷᠡᠭᠯᠡᠭᠡᠨ ᠦ ᠦᠶᠯᠡᠴᠢᠯᠡᠭᠡ  ᠢᠢ ᠬᠣᠯᠪᠣᠵᠤ ᠪᠣᠯᠳᠠᠭ〔17〕᠃ Servlet ᠨᠢ ᠪᠠᠰᠠ ᠦᠢᠯᠡᠴᠢᠯᠡᠭᠦᠷ ᠳᠡᠭᠡᠷ᠎ᠡ ᠬᠥᠳᠡᠯᠦᠩᠭᠦᠶ ᠰᠦᠯᠵᠢᠶᠡᠨ ᠦ ᠬᠠᠭᠤᠳᠠᠰᠤ ᠶᠢ ᠪᠡᠶᠡᠯᠡᠭᠦᠯᠳᠡᠭ ᠨᠢᠭᠡ ᠵᠦᠶᠯ ᠦᠨ ᠮᠡᠷᠭᠡᠵᠢᠯ᠃

Servlet ᠪᠣᠯ ᠲᠠᠪᠴᠠᠩ ᠠᠴᠠ ᠲᠤᠰᠠᠭᠠᠷᠯᠠᠵᠤ ᠳᠠᠢᠯᠬᠦ Java ᠫᠷᠤᠭ᠍ᠷᠠᠮ ᠪᠣᠯᠤᠨ᠎ᠠ᠂ ᠲᠡᠷᠡ ᠨᠢ ᠭᠣᠸᠯᠳᠠᠭᠤ ᠦᠢᠯᠡᠴᠢᠯᠡᠭᠦᠷ ᠳᠡᠭᠡᠷ᠎ᠡ ᠠᠵᠢᠯᠯᠠᠨ᠎ᠠ᠂ ᠲᠡᠭᠦᠨ ᠦ ᠥᠪᠡᠷᠮᠢᠴᠡ ᠴᠢᠨᠠᠷ ᠨᠢ ᠬᠥᠳᠡᠯᠦᠩᠭᠦᠢ ᠨᠡᠭᠡᠭᠡᠨ ᠠᠰᠢᠭᠯᠠᠭᠴᠢ ᠶᠢᠨ ᠠᠪᠬᠤ ᠭᠡᠰᠡᠨ ᠬᠠᠭᠤᠳᠠᠰᠤ  ᠶᠢ ᠪᠤᠢ ᠪᠣᠯᠭᠠᠳᠠᠭ᠃ ᠲᠡᠭᠦᠨ ᠦ ᠡᠭᠦᠷᠭᠡ ᠪᠣᠯ ᠡᠮᠦᠨ᠎ᠡ ᠲᠠᠪᠴᠢᠩ ᠪᠤᠶᠤ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢᠳ ᠡᠴᠡ ᠠᠷᠤ ᠲᠠᠪᠴᠢᠩ ᠤᠷᠤᠭᠤ ᠶᠠᠪᠤᠭᠤᠯᠤᠭᠰᠠᠨ ᠭᠤᠶᠤᠴᠢᠯᠠᠯ ᠢ ᠰᠢᠶᠳᠪᠦᠷᠢᠯᠡᠨ᠎ᠡ᠃ ᠳᠠᠷᠤᠶ ᠲᠡᠷᠡ ᠪᠣᠯ ᠡᠮᠦᠨ᠎ᠡ ᠲᠠᠪᠴᠢᠩ ᠬᠢᠭᠡᠳ ᠠᠷᠤ ᠲᠠᠪᠴᠢᠩ  ᠤᠨ  ᠳᠠᠢᠲ᠋ᠠ  ᠶᠢᠨ ᠬᠦᠮᠦᠷᠭᠡ  ᠶᠢᠨ ᠬᠤᠭᠤᠷᠤᠨᠳᠤᠬᠢ ᠳᠠᠪᠬᠤᠷᠭ᠎ᠠ᠂ ᠭᠡᠪᠡᠴᠦ ᠲᠡᠷᠡ ᠨᠢ ᠡᠩ ᠦᠨ Java ᠫᠷᠤᠭ᠍ᠷᠠᠮ ᠲᠠᠶ ᠠᠳᠠᠯᠢ ᠤᠢᠭᠡᠢ᠂ ᠲᠡᠭᠦᠨ ᠢ ᠰᠦᠯᠵᠢᠶᠡᠨ ᠦ ᠬᠠᠭᠤᠳᠠᠰᠤᠨ ᠳᠡᠭᠡᠷ᠎ᠡ ᠡᠴᠡ ᠠᠴᠢᠶᠠᠯᠠᠭᠰᠠᠨ ᠶᠤᠮ᠃ ᠡᠭᠦᠨ ᠦ ᠬᠠᠮᠲᠤ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢ ᠶᠢᠨ ᠦᠵᠦᠭᠦᠷ ᠲᠦ ᠬᠠᠷᠠᠭᠠᠯᠵᠠᠭᠰᠠᠨ Servlet ᠵᠢᠨ ᠬᠡᠶᠢᠰᠪᠦᠷᠢ ᠮᠠᠰᠢᠨ ᠢ ᠬᠡᠷᠡᠭᠵᠢᠭᠦᠯᠬᠦ ᠬᠡᠷᠡᠭᠲᠡᠢ᠃

#### ᠭᠤᠷᠪᠠᠨ ᠲᠠᠪᠬᠤᠷᠭᠠᠲᠤ ᠪᠦᠳᠤᠴᠡ

ᠭᠤᠷᠪᠠᠨ ᠳᠠᠪᠬᠤᠷᠭᠠᠲᠤ ᠪᠦᠲᠦᠴᠡ (3-tier architecture) ᠡᠩ ᠦᠨ ᠤᠳᠬ᠎ᠠ ᠳᠡᠭᠡᠷᠡᠬᠢ ᠭᠤᠷᠪᠠᠨ ᠳᠠᠪᠬᠤᠷᠭᠠᠲᠦ ᠪᠦᠲᠦᠴᠡ ᠪᠣᠯ ᠳᠠᠷᠤᠶ ᠪᠦᠬᠦᠶᠢᠯᠡ ᠲᠤᠬᠠᠶᠢᠯᠠᠭᠰᠠᠨ ᠠᠵᠢᠯ ᠤᠨ ᠬᠡᠷᠡᠭᠯᠡᠯᠲᠡ ᠶᠢ ᠵᠠᠭᠠᠭ ᠭᠠᠳᠠᠷᠭᠤᠨ ᠳᠠᠪᠬᠤᠷᠭ᠎ᠠ (User Interface layer)᠂ ᠲᠤᠬᠠᠶᠢᠯᠠᠭᠰᠠᠨ ᠠᠵᠢᠯ ᠤᠨ ᠯᠣᠭᠢᠭ ᠤᠨ ᠳᠠᠪᠬᠤᠷᠭ᠎ᠠ (Business Logic Layer)᠂ ᠳ᠋ᠠᠶᠢᠲ᠋ᠠ ᠰᠤᠷᠪᠤᠯᠵᠢᠯᠠᠬᠤ ᠳᠠᠪᠬᠤᠷᠭ᠎ᠠ (Data access layer) ᠭᠡᠵᠦ ᠠᠩᠭᠢᠯᠠᠪᠠ᠃ ᠳᠡᠰ ᠳᠠᠪᠬᠤᠷᠭ᠎ᠠ  ᠢᠯᠭᠠᠬᠤ  ᠶᠢᠨ ᠵᠣᠷᠢᠯᠭ᠎ᠠ ᠪᠣᠯ ᠳᠠᠷᠤᠶ 《 ᠥᠨᠳᠥᠷ ᠪᠠᠷᠢᠯᠳᠤᠯ ᠳᠣᠣᠷ᠎ᠠ ᠡᠪᠴᠡᠯᠳᠦᠯ 》ᠦᠵᠡᠯ ᠰᠠᠨᠠᠭ᠎ᠠ ᠪᠣᠯᠤᠨ᠎ᠠ ᠃ ᠵᠥᠭᠡᠯᠡᠨ ᠬᠡᠷᠡᠭᠰᠡᠯ ᠦᠨ ᠰᠢᠰᠲ᠋ᠧᠮ ᠦᠨ ᠪᠦᠲᠦᠴᠡ ᠶᠢᠨ ᠵᠢᠷᠤᠭ ᠲᠥᠯᠥᠪᠯᠡᠭᠡ ᠳᠦ᠂ ᠳᠠᠪᠬᠤᠷᠭᠠᠲᠤ ᠬᠡᠯᠪᠡᠷᠢ ᠶᠢᠨ ᠪᠦᠲᠦᠴᠡ ᠪᠣᠯ ᠦᠷᠭᠦᠯᠵᠢ ᠬᠠᠷᠠᠭᠳᠠᠳᠠᠭ ᠪᠥᠭᠡᠳ ᠪᠠᠰᠠ ᠴᠤ ᠬᠠᠮᠤᠭ  ᠴᠢᠬᠤᠯᠠ ᠨᠢᠭᠡ ᠵᠦᠢᠯ ᠦᠨ ᠪᠦᠲᠦᠴᠡ ᠮᠥᠨ᠃ ᠮᠢᠺᠷᠤᠰᠤᠹᠲ  ᠤᠨ ᠲᠠᠨᠢᠯᠴᠠᠭᠤᠯᠤᠭᠰᠠᠨ ᠳᠠᠪᠬᠤᠷᠭᠠᠲᠤ ᠬᠡᠯᠪᠡᠷᠢ ᠶᠢᠨ ᠪᠦᠲᠦᠴᠡ ᠶᠢ ᠶᠡᠷᠦ ᠳᠡᠭᠡᠨ ᠭᠤᠷᠪᠠᠨ ᠳᠠᠪᠬᠤᠷᠭ᠎ᠠ ᠬᠤᠪᠢᠶᠠᠳᠠᠭ ᠂ ᠳᠤᠤᠷ᠎ᠠ ᠡᠴᠡ ᠳᠡᠭᠡᠭᠰᠢ ᠪᠠᠨ ᠠᠨᠭᠭᠢᠯᠠᠪᠠᠯ᠂ ᠳ᠋ᠠᠶᠢᠲ᠋ᠠ ᠰᠤᠷᠪᠤᠯᠵᠢᠯᠠᠬᠤ ᠳᠠᠪᠬᠤᠷᠭ᠎ᠠ (Data access layer)᠂ ᠠᠵᠢᠯ ᠤᠨ ᠯᠣᠭᠢᠭ ᠤᠨ ᠳᠠᠪᠬᠤᠷᠭ᠎ᠠ (Business Logic Layer)᠂ ᠵᠠᠭᠠᠭ ᠭᠠᠳᠠᠷᠭᠤᠨ ᠳᠠᠪᠬᠤᠷᠭ᠎ᠠ (User Interface layer)᠃

ᠢᠯᠡᠷᠬᠡᠶᠢᠯᠡᠬᠦ ᠳᠠᠪᠬᠤᠷᠭ᠎ᠠ ( web ᠳᠠᠪᠬᠤᠷᠭ᠎ᠠ ) ᠄ ᠢᠯᠡᠳᠬᠡᠬᠦ ᠳᠠᠪᠬᠤᠷᠭ᠎ᠠ ᠶᠢ ᠪᠠᠰᠠ ᠵᠠᠭᠠᠭ ᠭᠠᠳᠠᠷᠭᠤ ᠭᠡᠨ᠎ᠡ ᠂ ᠬᠠᠮᠤᠭ ᠭᠠᠳᠠᠷ ᠳᠠᠪᠬᠤᠷᠭ᠎ᠠ ︵ᠬᠠᠮᠤᠭ ᠳᠡᠭᠡᠰᠦ ᠳᠠᠪᠬᠤᠷᠭ᠎ᠠ︶ ᠳᠤ ᠪᠠᠶᠢᠨ᠎ᠠ ᠂ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢ ᠡᠴᠡ ᠬᠠᠮᠤᠭ ᠤᠢᠷ᠎ᠠ᠃ ᠲᠣᠭ᠎ᠠ ᠪᠠᠷᠢᠮᠲᠠ ᠶᠢ ᠳᠡᠯᠭᠡᠨ ᠦᠵᠡᠭᠦᠯᠬᠦ ᠪᠠ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢ ᠶᠢᠨ ᠣᠷᠣᠭᠤᠯᠤᠭᠰᠠᠨ ᠲᠣᠭ᠎ᠠ ᠪᠠᠷᠢᠮᠲᠠ ᠶᠢ ᠬᠦᠯᠢᠶᠡᠨ ᠠᠪᠬᠤ ᠳᠤ ᠬᠡᠷᠡᠭᠯᠡᠵᠦ ᠂ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢᠳ ᠲᠦ ᠨᠢᠭᠡ ᠵᠦᠶᠯ ᠦᠨ ᠬᠠᠷᠢᠯᠴᠠᠬᠤ ᠬᠡᠯᠪᠡᠷᠢ ᠶᠢᠨ ᠠᠵᠢᠯᠯᠠᠬᠤ ᠵᠠᠭᠠᠭ ᠭᠠᠳᠠᠷᠭᠤ ᠶᠢ ᠬᠠᠩᠭᠠᠨ᠎ᠠ ᠃

ᠲᠤᠬᠠᠶᠢᠯᠠᠭᠰᠠᠨ ᠠᠵᠢᠯ ᠤᠨ ᠯᠣᠭᠢᠭ ᠤᠨ ᠳᠠᠪᠬᠤᠷᠭ᠎ᠠ (Service ᠳᠠᠪᠬᠤᠷᠭ᠎ᠠ)᠄ ᠵᠠᠩᠭᠢᠯᠠᠭ᠎ᠠ ᠶᠢᠨ ᠠᠵᠢᠯ ᠢ ᠰᠢᠶᠳᠪᠦᠷᠢᠯᠡᠬᠦ ᠪᠠ ᠲᠣᠭ᠎ᠠ ᠪᠠᠷᠢᠮᠲᠠ ᠶᠢ ᠳᠠᠮᠵᠢᠭᠤᠯᠬᠤ ᠶᠢ ᠬᠠᠷᠢᠭᠤᠴᠠᠨ᠎ᠠ ᠃ ᠪᠤᠳᠤᠯᠢᠶᠠᠨᠲᠠᠶ ᠯᠣᠭᠢᠭ ᠮᠠᠭᠠᠳᠯᠠᠯᠲᠠ ᠪᠠ ᠳ᠋ᠠᠶᠢᠲ᠋ᠠ ᠬᠥᠮᠥᠷᠭᠡ ᠳᠦ ᠬᠣᠯᠪᠣᠭᠳᠠᠭᠰᠠᠨ ᠲᠣᠭ᠎ᠠ ᠪᠠᠷᠢᠮᠲᠠ ᠶᠢ ᠰᠢᠯᠭᠠᠨ ᠭᠡᠷᠡᠴᠢᠯᠡᠬᠦ ᠳᠦ ᠪᠦᠷ ᠡᠨᠳᠡ ᠰᠢᠶᠳᠪᠦᠷᠢᠯᠡᠬᠦ ᠴᠢᠬᠤᠯᠠᠲᠠᠶ ᠃ ᠭᠣᠣᠯᠳᠠᠭᠤ ᠪᠣᠳᠠᠲᠠᠢ ᠠᠰᠠᠭᠤᠳᠠᠯ ᠳᠤ ᠴᠢᠭᠯᠡᠭᠦᠯᠦᠨ ᠬᠢᠭᠰᠡᠨ ᠠᠵᠢᠯᠯᠠᠭ᠎ᠠ ᠪᠣᠯᠤᠨ᠎ᠠ᠂ ᠪᠠᠰᠠ ᠲᠣᠭ᠎ᠠ ᠪᠠᠷᠢᠮᠲᠠ ᠶᠢᠨ ᠳᠠᠪᠬᠤᠷᠭ᠎ᠠ ᠶᠢᠨ ᠠᠵᠢᠯᠯᠠᠭ᠎ᠠ ᠭᠡᠵᠦ ᠣᠶᠢᠯᠠᠭᠠᠵᠤ ᠪᠣᠯᠤᠨ᠎ᠠ᠂ ᠲᠣᠭ᠎ᠠ ᠪᠠᠷᠢᠮᠲᠠ ᠶᠢᠨ ᠠᠵᠢᠯ ᠤᠨ ᠯᠣᠭᠢᠭ  ᠢ ᠰᠢᠢᠳᠪᠦᠷᠢᠯᠡᠨ᠎ᠡ᠂ ᠬᠡᠷᠪᠡ ᠲᠣᠭ᠎ᠠ ᠪᠠᠷᠢᠮᠲᠠ ᠶᠢᠨ ᠳᠠᠪᠬᠤᠷᠭ᠎ᠠ ᠨᠢ ᠵᠡᠷᠭᠡᠯᠡᠭᠰᠡᠨ ᠮᠣᠳᠣ ᠪᠣᠯ ᠯᠣᠭᠢᠭ ᠳᠠᠪᠬᠤᠷᠭ᠎ᠠ ᠨᠢ ᠳᠠᠷᠤᠢ ᠡᠳᠡᠭᠡᠷ ᠵᠡᠷᠭᠡᠯᠡᠭᠰᠡᠨ ᠮᠣᠳᠣ ᠶᠢ ᠪᠠᠶᠢᠭᠤᠯᠤᠭᠰᠠᠨ ᠶᠠᠪᠤᠳᠠᠯ ᠪᠣᠯᠤᠨ᠎ᠠ᠃

ᠳ᠋ᠠᠶᠢᠲ᠋ᠠ ᠶᠢᠨ ᠰᠤᠷᠪᠤᠯᠵᠢᠯᠠᠬᠤ ᠳᠠᠪᠬᠤᠷᠭ᠎ᠠ (Dao ᠳᠠᠪᠬᠤᠷᠭ᠎ᠠ)᠄ ᠭᠣᠸᠯ ᠨᠢ ᠳ᠋ᠠᠶᠢᠲ᠋ᠠ ᠬᠥᠮᠥᠷᠭᠡ ᠶᠢ ᠰᠢᠭᠤᠳ ᠰᠤᠷᠪᠤᠯᠵᠢᠯᠠᠬᠤ ᠶᠢ ᠬᠠᠷᠢᠭᠤᠴᠠᠵᠤ ᠂ ᠲᠤᠬᠠᠶᠢᠯᠠᠭᠰᠠᠨ ᠠᠵᠢᠯ ᠤᠨ ᠯᠣᠭᠢᠭ ᠳᠠᠪᠬᠤᠷᠭ᠎ᠠ ᠳᠤ ᠲᠣᠭ᠎ᠠ ᠪᠠᠷᠢᠮᠲᠠ ᠬᠠᠩᠭᠠᠨ᠎ᠠ ᠂ ᠳᠠᠮᠵᠢᠭᠤᠯᠵᠤ ᠣᠷᠣᠭᠤᠯᠤᠭᠰᠠᠨ ᠬᠡᠮᠵᠢᠭᠳᠡᠯ ᠢᠶᠡᠷ ᠳ᠋ᠠᠶᠢᠲ᠋ᠠ  ᠶᠢᠨ ᠬᠥᠮᠥᠷᠭᠡ ᠶᠢ ᠠᠵᠢᠯᠯᠠᠭᠤᠯᠤᠨ᠎ᠠ ᠂ ᠨᠡᠮᠡᠬᠦ ᠂ ᠬᠠᠰᠤᠬᠤ ᠂ ᠵᠠᠰᠠᠬᠤ ᠂ ᠪᠠᠶᠢᠴᠠᠭᠠᠬᠤ ᠃

### ajax ᠮᠡᠷᠭᠡᠵᠢᠯ

AJAX ᠪᠤᠯ JavaScript ᠪᠠ XML ᠵᠢ ᠢᠵᠢᠯ ᠪᠤᠰᠤ ᠠᠯᠬᠤᠮᠵᠢᠭᠤᠯᠳᠠᠭ ᠃ AJAX ᠪᠣᠯ ᠨᠢᠭᠡ ᠵᠦᠢᠯ ᠦᠨ ᠲᠦᠷᠭᠡᠨ ᠬᠥᠳᠡᠯᠦᠨᠭᠭᠦᠢ ᠰᠦᠯᠵᠢᠶᠡᠨ ᠦ ᠨᠢᠭᠤᠷ ᠶᠢ ᠡᠭᠦᠳᠦᠨ ᠪᠠᠶᠢᠭᠤᠯᠬᠤ ᠳᠤ ᠬᠡᠷᠡᠭᠯᠡᠬᠦ ᠮᠡᠷᠭᠡᠵᠢᠯ ᠪᠣᠯᠤᠨ᠎ᠠ᠃ ᠠᠷᠤ ᠲᠠᠪᠴᠠᠩ ᠳᠡᠭᠡᠷ᠎ᠡ ᠦᠢᠯᠡᠴᠢᠯᠡᠭᠦᠷ ᠲᠡᠶ ᠪᠠᠭ᠎ᠠ ᠬᠡᠮᠵᠢᠶᠡᠨ ᠦ ᠲᠣᠭ᠎ᠠ ᠪᠠᠷᠢᠮᠲᠠ ᠰᠣᠯᠢᠯᠴᠠᠬᠤ ᠪᠠᠷ ᠳᠠᠮᠵᠢᠭᠤᠯᠤᠨ᠂ AJAX ᠨᠢ ᠰᠦᠯᠵᠢᠶᠡᠨ ᠦ ᠬᠠᠭᠤᠳᠠᠰᠤ ᠶᠢ ᠢᠵᠢᠯ ᠪᠤᠰᠤ ᠠᠯᠬᠤᠮ ᠢᠶᠠᠷ ᠰᠢᠨᠡᠳᠬᠡᠳᠡᠭ᠃ ᠡᠨᠡ ᠨᠢ ᠪᠦᠬᠦᠶᠢᠯᠡ ᠰᠦᠯᠵᠢᠶᠡᠨ ᠦ ᠨᠢᠭᠤᠷ  ᠢ ᠳᠠᠭᠢᠵᠤ ᠠᠴᠢᠶᠠᠯᠠᠬᠤ ᠥᠬᠡᠶ ᠪᠠᠶᠢᠳᠠᠯ ᠳᠣᠸᠷ᠎ᠠ ᠰᠦᠯᠵᠢᠶᠡᠨ ᠦ ᠬᠠᠭᠤᠳᠠᠰᠤᠨ ᠤ ᠶᠠᠮᠠᠷ ᠨᠢᠭᠡᠨ ᠬᠡᠰᠡᠭ  ᠢ ᠰᠢᠨᠡᠳᠬᠡᠵᠦ ᠪᠣᠯᠬᠤ ᠶᠢ ᠬᠠᠷᠠᠭᠤᠯᠵᠤ ᠪᠠᠶᠢᠨ᠎ᠠ ᠃ ᠤᠯᠠᠮᠵᠢᠯᠠᠯᠲᠤ ᠰᠦᠯᠵᠢᠶᠡᠨ ᠨᠢᠭᠤᠷ ( AJAX ᠢ ᠬᠡᠷᠡᠭᠯᠡᠬᠦ ᠦᠭᠡᠢ ) ᠬᠡᠷᠪᠡ ᠠᠭᠤᠯᠭ᠎ᠠ ᠶᠢ ᠰᠢᠨᠡᠳᠬᠡᠬᠦ ᠴᠢᠬᠤᠯᠠ  ᠲᠠᠶ ᠪᠣᠯ ᠂ ᠡᠷᠬᠡᠪᠰᠢ ᠪᠦᠬᠦᠶᠢᠯᠡ ᠰᠦᠯᠵᠢᠶᠡᠨ ᠨᠢᠭᠤᠷ ᠳᠡᠭᠡᠷ᠎ᠡ ᠳᠠᠬᠢᠨ ᠠᠴᠢᠶᠠᠯᠠᠬᠤ ᠬᠡᠷᠡᠭᠲᠡᠶ ᠃

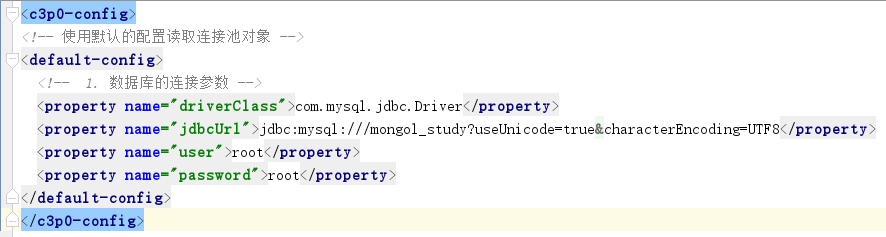
#### Html

#### Javascript

### ᠳᠠᠢᠲ᠋ᠠ ᠶᠢᠨ ᠰᠠᠩ  ᠤᠨ ᠬᠤᠯᠪᠤᠭᠳᠠᠯ ᠪᠦᠬᠦᠢ ᠮᠡᠷᠭᠡᠵᠢᠯ  ᠤᠨ ᠲᠠᠢᠯᠪᠦᠷᠢᠯᠡᠯᠲᠡ

#### C3p0 ᠵᠠᠯᠭᠠᠬᠤ ᠴᠦᠬᠦᠷᠦᠮ

Tomcat ᠦᠶᠯᠡᠴᠢᠯᠡᠭᠡ ᠮᠠᠰᠢᠨ ᠪᠠ MySQL ᠳ᠋ᠠᠶᠢᠲ᠋ᠠ ᠬᠥᠮᠥᠷᠭᠡ ᠶᠢᠨ ᠬᠣᠭᠣᠷᠣᠨᠳᠣ ᠵᠠᠯᠭᠠᠬᠤ ᠦᠶᠡᠰ ᠭᠤᠷᠪᠠᠳᠤᠭᠠᠷ ᠡᠲᠡᠭᠡᠳ ᠦᠨ C3P0 ᠵᠠᠯᠭᠠᠬᠤ ᠴᠥᠭᠥᠷᠥᠮ ᠢ ᠬᠡᠷᠡᠭᠯᠡᠨ᠎ᠡ᠃ ᠵᠢᠷᠤᠭ ᠲᠦ ᠵᠢᠷᠤᠭᠰᠠᠨ ᠤᠯᠠᠭᠠᠨ ᠲᠦᠷᠪᠡᠭᠡᠯᠵᠢᠰᠦ  ᠶᠢᠨ ᠤᠷᠤᠨ  ᠳᠦ ᠦᠪᠡᠷ  ᠤᠨ  ᠳᠠᠢᠲ᠋ᠠ  ᠶᠢᠨ ᠬᠦᠮᠦᠷᠭᠡ  ᠤᠨ ᠨᠡᠷ᠎ᠡ ᠵᠢ ᠪᠢᠴᠢᠪᠡᠯ ᠪᠤᠯᠴᠢᠬᠠᠨ᠎ᠠ᠃



* + 1. Jdbc ᠮᠡᠷᠭᠡᠵᠢᠯ

ᠲᠤᠰ ᠰᠢᠰᠲᠸᠮ  ᠳᠦ ᠬᠡᠷᠡᠭᠯᠡᠭᠰᠡᠨ ᠪᠤᠯ ᠨᠢᠭᠡᠨᠲᠡ Jdbc ᠵᠢ ᠪᠠᠭᠴᠠᠯᠠᠭᠰᠠᠨ spring jdbc

#### Echarts  ᠳᠠᠢᠲ᠋ᠠ  ᠶᠢᠨ ᠦᠵᠡᠭᠳᠡᠬᠦᠢᠴᠡ

* + 1. Mysql  ᠳᠠᠢᠲ᠋ᠠ ᠶᠢᠨ ᠬᠦᠮᠦᠷᠭᠡ  ᠤᠨ ᠳᠦᠭᠦᠮ ᠲᠠᠢᠯᠪᠦᠷᠢᠯᠡᠯᠲᠡ

ᠲᠣᠰ ᠰᠢᠰᠲ᠋ᠧᠮ ᠦᠨ ᠬᠡᠪᠴᠢᠶ᠎ᠡ ᠂ ᠰᠢᠰᠲ᠋ᠧᠮ ᠦᠨ ᠠᠮᠢᠳᠤᠯᠢᠭ ᠴᠢᠨᠠᠷ ᠵᠢᠴᠢ ᠰᠢᠰᠲ᠋ᠧᠮ ᠦᠨ ᠨᠡᠭᠡᠭᠡᠯᠲᠡ ᠶᠢᠨ ᠥᠪᠡᠷ  ᠦᠨ ᠥᠷᠲᠡᠭ ᠢ ᠪᠣᠳᠣᠯᠬᠢᠯᠠᠵᠤ ᠂ ᠪᠢᠳᠡ MySQL  ᠢ ᠰᠣᠩᠭᠣᠵᠤ ᠳ᠋ᠠᠶᠢᠲ᠋ᠠ ᠶᠢᠨ ᠬᠥᠮᠥᠷᠭᠡ ᠨᠢ ᠲᠣᠰ ᠰᠢᠰᠲ᠋ᠧᠮ ᠦᠨ ᠳ᠋ᠠᠶᠢᠲ᠋ᠠ ᠶᠢᠨ ᠬᠠᠳᠠᠭᠠᠯᠠᠯᠲᠠ ᠶᠢᠨ ᠳ᠋ᠠᠶᠢᠲ᠋ᠠ ᠬᠥᠮᠥᠷᠭᠡ  ᠶᠢᠨ ᠬᠠᠮᠢᠶᠠᠷᠤᠯᠲᠠ ᠶᠢᠨ ᠰᠢᠰᠲ᠋ᠧᠮ ᠪᠣᠯᠤᠨ᠎ᠠ ᠃ MySQL ᠪᠣᠯ ᠬᠠᠮᠤᠭ ᠬᠦᠷᠢᠶᠡᠯᠡᠯ ᠲᠡᠶ ᠳ᠋ᠠᠶᠢᠲ᠋ᠠ ᠬᠥᠮᠥᠷᠭᠡ ᠶᠢᠨ ᠬᠠᠮᠢᠶᠠᠷᠤᠯᠲᠠ ᠶᠢᠨ ᠰᠢᠰᠲ᠋ᠧᠮ ᠂ ᠲᠡᠷᠡ ᠪᠣᠯ MySQLAB ᠨᠡᠭᠡᠭᠡᠯᠲᠡ ᠵᠢᠴᠢ ᠨᠡᠢᠲᠡᠯᠡᠬᠦ ᠪᠠ ᠰᠠᠯᠪᠤᠷᠢ ᠪᠠᠷᠢᠮᠲᠠᠯᠠᠵᠤ ᠪᠠᠢᠨ᠎ᠠ᠃ ᠲᠡᠭᠦᠨ ᠦ ᠦᠶᠯᠡᠴᠢᠯᠡᠬᠦ ᠮᠠᠰᠢᠨ ᠨᠢ ᠵᠠᠩᠭᠢᠯᠠᠭ᠎ᠠ ᠶᠢᠨ ᠡᠭᠦᠷᠭᠡ ᠪᠠ ᠬᠦᠨᠳᠦ ᠠᠴᠢᠶ᠎ᠠ ᠦᠶᠯᠡᠳᠪᠦᠷᠢᠯᠡᠬᠦ ᠰᠢᠰᠲ᠋ᠧᠮ ᠦᠨ ᠬᠡᠷᠡᠭᠯᠡᠯᠲᠡ ᠶᠢ ᠳᠡᠮᠵᠢᠬᠦ ᠶᠢᠨ ᠬᠠᠮᠲᠤ ᠪᠠᠰᠠ ᠰᠢᠭᠢᠳᠬᠡᠵᠦ ᠪᠣᠯᠤᠨ᠎ᠠ ᠨᠢᠭᠡ ᠶᠡᠬᠡ ᠲᠣᠬᠢᠷᠠᠭᠤᠯᠤᠭᠰᠠᠨ ᠵᠥᠭᠡᠯᠡᠨ ᠲᠣᠨᠣᠭ ᠳᠣᠲᠣᠷ᠎ᠠ ᠣᠴᠢᠨ᠎ᠠ ᠃ ᠲᠣᠰ ᠲᠣᠭ᠎ᠠ ᠪᠠᠷᠢᠮᠲᠠ ᠶᠢᠨ ᠬᠥᠮᠥᠷᠭᠡ ᠶᠢᠨ ᠰᠢᠰᠲ᠋ᠧᠮ ᠦᠨ ᠬᠦᠴᠦᠷᠬᠡᠭ ᠶᠡᠬᠡ ᠴᠢᠳᠠᠮᠵᠢ ᠂ ᠡᠯᠪᠡᠭ ᠪᠠᠶᠠᠯᠢᠭ ᠬᠡᠷ ᠡᠭᠯᠡᠭᠡᠨ ᠦ ᠫᠷᠤᠭ᠍ᠷᠠᠮ ᠨᠠᠶᠢᠷᠠᠭᠤᠯᠬᠤ ᠠᠭᠤᠯᠵᠠᠷ ᠤᠴᠢᠷ ᠠᠴᠠ (API)᠂ ᠠᠮᠢᠳᠤᠯᠢᠭ ᠴᠢᠨᠠᠷ ᠵᠢᠴᠢ ᠤᠷᠠᠨ ᠨᠠᠷᠢᠯᠢᠭ ᠰᠢᠰᠲ᠋ᠧᠮ ᠦᠨ ᠪᠦᠲᠦᠴᠡ 25᠂ ᠥᠷᠭᠡᠨ ᠤᠯᠠᠨ ᠵᠥᠭᠡᠯᠡᠨ ᠲᠤᠨᠤᠭ  ᠲᠤ ᠪᠠᠬᠠᠲᠠᠶ ᠬᠥᠮᠦᠰ ᠴᠢᠨᠠᠭᠰᠢᠯᠠᠪᠠᠯ ᠬᠤᠳᠠᠯᠳᠤᠭᠠᠨ ᠤ ᠵᠥᠭᠡᠯᠡᠨ ᠲᠤᠨᠤᠭ ᠢ ᠬᠡᠷᠡᠭᠯᠡᠵᠦ ᠪᠠᠶᠢᠨ᠎ᠠ᠃ ᠡᠷᠦᠬᠡ ᠠᠮᠠ ᠨᠢ ᠬᠥᠮᠦᠰ ᠦᠨ ᠪᠠᠬᠠᠷᠬᠠᠯ ᠢ ᠲᠠᠲᠠᠵᠤ ᠂ ᠢᠯᠠᠩᠭᠤᠶ᠎ᠠ ᠲᠣᠰ ᠳ᠋ᠠᠶᠢᠲ᠋ᠠ ᠶᠢᠨ ᠬᠥᠮᠥᠷᠭᠡ ᠶᠢᠨ ᠰᠢᠰᠲ᠋ ᠧᠮ ᠨᠢ Apache ᠪᠣᠯᠤᠨ PHP ᠲᠠᠢ ᠤᠶᠠᠯᠳᠤᠵᠤ ᠂ ᠲᠣᠭ᠎ᠠ ᠪᠠᠷᠢᠮᠲᠠ ᠳᠤ ᠰᠠᠭᠤᠷᠢᠯᠠᠭᠰᠠᠨ ᠶᠤᠮ ᠃ ᠬᠥᠮᠥᠷᠭᠡ ᠶᠢᠨ ᠬᠥᠳᠡᠯᠦᠩᠭᠦᠶ ᠰᠦᠯᠵᠢᠶᠡᠨ ᠦ ᠬᠡᠷᠡᠭᠯᠡᠭᠡᠨ ᠦ ᠫᠷᠤᠭ᠍ᠷᠠᠮ ᠨᠢ ᠬᠦᠴᠦᠷᠬᠡᠭ ᠶᠡᠬᠡ ᠬᠥᠳᠡᠯᠭᠡᠬᠦ ᠬᠦᠴᠦᠨ ᠬᠠᠩᠭᠠᠵᠠᠶ ᠃ MySQL ᠵᠢᠨ ᠭᠣᠣᠯ ᠣᠨᠴᠠᠯᠢᠭ ᠪᠠ ᠦᠢᠯᠡᠳᠦᠯ ᠄ MySQL ᠳ᠋ᠠᠶᠢᠲ᠋ᠠ ᠬᠥᠮᠥᠷᠭᠡ ᠪᠣᠯ ᠨᠢᠭᠡᠨ ᠮᠠᠰᠢ ᠣᠯᠠᠨ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢᠳ ᠢ ᠬᠠᠮᠲᠤ ᠳᠤᠨᠢ ᠰᠤᠷᠪᠤᠯᠵᠢᠯᠠᠭᠤᠯᠵᠤ ᠴᠢᠳᠠ ᠬᠤ ᠳ᠋ᠠᠶᠢᠲ᠋ᠠ ᠬᠥᠮᠥᠷᠭᠡ ᠪᠣᠯᠤᠨ᠎ᠠ᠂ ᠳ᠋ᠠᠶᠢᠲ᠋ᠠ ᠬᠥᠮᠥᠷᠭᠡ ᠶᠢᠨ ᠳᠣᠲᠣᠭᠠᠳᠤ ᠠᠴᠠ ᠪᠣᠳᠠᠲᠠᠶ ᠣᠳᠣ ᠠᠪᠴᠤ ᠬᠡᠯᠡᠪᠡᠯ ᠂ ᠳ᠋ᠠᠶᠢᠲ᠋ᠠ ᠶᠢᠨ ᠬᠥᠮᠥᠷᠭᠡ ᠶᠢᠨ ᠠᠵᠢᠯᠯᠠᠭ᠎ᠠ ᠣᠯᠠᠨ ᠱᠤᠭᠤᠮ ᠤᠨ ᠵᠠᠯᠭᠠᠯᠲᠠ ᠪᠡᠶᠡᠯᠡᠭᠳᠡ ᠵᠦ ᠂ ᠳ᠋ᠠᠶᠢᠲ᠋ᠠ ᠶᠢᠨ ᠬᠥᠮᠥᠷᠭᠡ ᠶᠢᠨ ᠠᠵᠢᠯᠯᠠᠬᠤ ᠠᠰᠢᠭᠯᠠᠮᠵᠢ ᠪᠠ ᠪᠠᠭᠠᠰᠤᠯᠲᠠ ᠶᠢ ᠳᠡᠭᠡᠭᠰᠢᠯᠡᠭᠦᠯᠪᠡ ᠳ᠋ᠠᠶᠢᠲ᠋ᠠ ᠶᠢᠨ ᠬᠥᠮᠥᠷᠭᠡ ᠶᠢᠨ ᠲᠣᠭ᠎ᠠ ᠪᠠᠷᠢᠮᠲᠠ ᠰᠢᠶᠳᠪᠦᠷᠢᠯᠡᠬᠦ ᠴᠠᠭ ᠢ ᠥᠩᠭᠡᠷᠡᠭᠦᠯᠵᠡᠶ ᠃ ᠲᠣᠰ ᠲᠣᠭ᠎ᠠ ᠪᠠᠷᠢᠮᠲᠠ ᠶᠢᠨ ᠬᠥᠮᠥᠷᠭᠡ ᠶᠢᠨ ᠬᠡᠷᠡᠭᠯᠡᠬᠦ ᠰᠦᠯᠵᠢᠶᠡᠨ ᠦ ᠪᠦᠲᠦᠴᠡ ᠨᠢ C/S ᠰᠦᠯᠵᠢᠶᠡᠨ ᠦ ᠬᠡᠷᠡᠭᠯ ᠡᠬᠦ ᠫᠷᠤᠭ᠍ᠷᠠᠮ ᠤᠨ ᠪᠦᠲᠦᠴᠡ ᠳ᠋ᠠᠶᠢᠲ᠋ᠠ ᠶᠢᠨ ᠬᠥᠮᠥᠷᠭᠡ ᠂ ᠪᠠᠰᠠ ᠳ᠋ᠠᠶᠢᠲ᠋ᠠ ᠶᠢᠨ ᠬᠥᠮᠥᠷᠭᠡ ᠳᠦ ᠠᠳᠠᠯᠢ ᠪᠤᠰᠤ ᠬᠠᠮᠠᠭᠠᠯᠠᠬᠤ ᠶᠠᠪᠤᠴᠠ ᠵᠢᠴᠢ ᠠᠳᠠᠯᠢ ᠪᠤᠰᠤ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢ ᠶᠢᠨ ᠳᠤᠭᠤᠶᠢᠯᠠᠩ ᠳ᠋ᠠᠶᠢᠲ᠋ᠠ ᠬᠥᠮᠥᠷᠭᠡ ᠶᠢ ᠰᠤᠷᠪᠤᠯᠵᠢᠯᠠᠬᠤ ᠡᠷᠬᠡ ᠲᠡᠶ ᠬᠢᠵᠠᠭᠠᠷ ᠤᠨ ᠡᠵᠡᠮᠳᠡᠯ ᠃ ᠪᠦᠲᠦᠴᠡ ᠳᠦ ᠪᠠᠢᠴᠠᠭᠠᠬᠤ ᠬᠡᠯᠡ (SQL) ᠪᠣᠯ ᠨᠢᠭᠡ ᠵᠦᠶᠯ ᠦᠨ ᠪᠠᠷᠢᠮᠵᠢᠶᠠᠵᠢᠭᠰᠠᠨ ᠬᠡᠯᠡ ᠪᠣᠯᠤᠨ᠎ᠠ᠂ ᠲᠡᠷᠡ ᠨᠢ ᠮᠡᠳᠡᠭᠡ ᠵᠠᠩᠭᠢ ᠶᠢ ᠬᠠᠳᠠᠭᠠᠯᠠᠬᠤ᠂ ᠬᠠᠳᠠᠭᠠᠯᠠᠬᠤ ᠭᠠᠷᠭᠠᠬᠤ ᠪᠠ ᠭᠠᠷᠭᠠᠬᠤ ᠰᠢᠨᠡᠳᠬᠡᠬᠦ ᠳᠦ ᠨᠠᠩ ᠠᠮᠠᠷᠬᠠᠨ ᠃ ᠵᠢᠱᠢᠶᠡᠯᠡᠪᠡᠯ ᠪᠢᠳᠡ ᠪᠦᠲᠦᠴᠡ ᠳᠦ ᠪᠠᠶᠢᠴᠠᠭᠠᠬᠤ ᠬᠡᠯᠡ ᠪᠡᠷ ᠨᠢᠭᠡ ᠰᠦᠯᠵᠢᠶᠡᠨ ᠦ ᠥᠷᠲᠡᠭᠡ ᠪᠣᠯᠭᠠᠵᠤ ᠪᠦᠲᠦᠭᠡᠭᠳ ᠡᠬᠦᠨ ᠦ ᠰᠤᠷᠠᠭ ᠵᠠᠩᠭᠢ ᠶᠢ ᠡᠷᠢᠵᠦ ᠪᠣᠯᠤᠨ᠎ᠠ ᠵᠢᠴᠢ ᠬᠠᠳᠠᠭᠠᠯᠠᠭᠰᠠᠨ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢ ᠶᠢᠨ ᠮᠡᠳᠡᠭᠡ ᠵᠠᠩᠭᠢ ᠂ ᠬᠠᠮᠲᠤ ᠳᠤMySQL ᠨᠢ ᠪᠠᠰᠠ ᠭᠦᠶᠴᠡᠳ ᠬᠤᠷᠳᠤᠨ ᠪᠠ ᠠᠮᠢᠳᠤᠯᠢᠭ ᠴᠢᠳᠠᠮᠵᠢ ᠶᠢ ᠬᠠᠩᠭᠠᠵᠤ ᠪᠢᠳᠡᠨ ᠦ ᠬᠠᠳᠠᠭᠠᠯᠠᠬᠤ ᠶᠢ ᠵᠥᠪᠰᠢᠶᠡᠷᠡᠨ᠎ᠡ ᠬᠠᠳᠠᠭᠠᠯᠠᠵᠤ ᠲᠡᠮᠳᠡᠭᠯᠡᠭᠰᠡᠨ ᠪᠢᠴᠢᠭ ᠮᠠᠲ᠋ᠧᠷᠢᠶᠠᠯ ᠤᠨ ᠬᠠᠢᠷᠴᠠᠭ ᠤᠨ ᠬᠣᠯᠪᠣᠭᠳᠠᠯ ᠪᠦᠬᠦᠢ ᠵᠢᠷᠤᠭ ᠳᠦᠷᠰᠦ ᠶᠢᠨ ᠮᠡᠳᠡᠭᠡ ᠵᠠᠩᠭᠢ ᠃ MySQL ᠳ᠋ᠠᠶᠢᠲ᠋ᠠ ᠬᠥᠮᠥᠷᠭᠡ ᠶᠢᠨ ᠭᠣᠸᠯ ᠬᠠᠷᠠᠯᠲᠠ ᠪᠣᠯ ᠢᠳᠡᠷᠡᠭᠦᠨ ᠴᠢᠭᠢᠷᠠᠭ ᠂ ᠬᠤᠷᠳᠤᠨ ᠪᠠ ᠠᠮᠠᠷᠬᠠᠨ ᠬᠡᠷᠡᠭᠯᠡᠬᠦ 〔26〕 ᠂ ᠬᠠᠮᠤᠭ ᠡᠬᠢᠨ ᠳᠦ ᠪᠡᠨ ᠪᠢᠳᠡ ᠡᠢᠮᠦ ᠶᠠᠩᠵᠤ ᠶᠢᠨ ᠨᠢᠭᠡ ᠶᠢ ᠬᠡᠷᠡᠭᠰᠡᠨ᠎ᠡ SQL ᠦᠢᠯᠡᠴᠢᠯᠡᠭᠦᠷ ᠂ ᠲᠡᠷᠡ ᠨᠢ ᠶᠠᠮᠠᠷ ᠴᠤ ᠦᠨ᠎ᠡ ᠦᠭᠡᠢ ᠬᠠᠲᠠᠭᠤ ᠬᠡᠷᠡᠭᠰᠡᠯ ᠦᠨ ᠲᠠᠪᠴᠠᠩ ᠳᠡᠭᠡᠷ᠎ᠡ ᠭᠠᠷᠴᠤ ᠢᠷᠡᠬᠦ ᠲᠣᠭ᠎ᠠ ᠪᠠᠷᠢᠮᠲᠠ ᠶᠢᠨ ᠬᠥᠮᠥᠷᠭᠡ ᠶᠢ ᠬᠠᠩᠭᠠᠬᠤ ᠦᠢᠯᠡᠳᠪᠦᠷᠢ ᠶᠢ ᠰᠢᠢᠳᠪᠦᠷᠢᠯᠡᠵᠦ ᠴᠢᠳᠠᠬᠤ ᠮᠥᠷᠲᠡᠭᠡᠨ ᠨᠢᠭᠡᠨ ᠲᠣᠭᠠᠨ ᠤ ᠲᠡᠰ ᠳᠡᠭᠡᠷᠡᠬᠢ ᠲᠤᠮᠤ ᠬᠡᠯᠪᠡᠷᠢ ᠶᠢᠨ ᠳ᠋ᠠᠶᠢᠲ᠋ᠠ ᠬᠥᠮᠥᠷᠭᠡ ᠶᠢᠨ ᠬᠤᠷᠳᠤᠴᠠ ᠨᠢ ᠨᠡᠩ ᠲᠦᠷᠭᠡᠨ᠂ MySQL ᠡᠭᠦᠨ ᠡᠴᠡ ᠪᠤᠯᠵᠤ ᠪᠤᠢ ᠪᠣᠯᠵᠠᠶ᠃MySQL ᠳ᠋ᠠᠶᠢᠲ᠋ᠠ ᠶᠢᠨ ᠬᠥᠮᠥᠷᠭᠡ ᠶᠢᠨ ᠭᠣᠸᠯ ᠴᠢᠳᠠᠮᠵᠢ ᠨᠢ ᠵᠥᠪᠬᠡᠨ ᠮᠤᠨᠳᠠᠭ ᠶᠡᠬᠡ ᠪᠤᠶᠤ ᠪᠤᠳᠤᠯᠢᠶᠠᠨᠲᠠᠶ ᠮᠡᠳᠡᠭᠡ ᠵᠠᠩᠭᠢ ᠵᠢᠴᠢ ᠰᠠᠭᠤᠷᠢ ᠳᠤ ᠪᠠᠢᠨ᠎ᠠ Web ᠶᠢᠨ ᠬᠥᠮᠥᠷᠭᠡ ᠶᠢᠨ ᠬᠠᠳᠠᠭᠠᠯᠠᠭᠳᠠᠴᠠ ᠶᠢᠨ ᠠᠰᠠᠭᠤᠨ ᠯᠠᠪᠯᠠᠬᠤ ᠭᠤᠶᠤᠴᠢᠯᠠᠯ ᠨᠢ ᠵᠥᠪᠬᠡᠨ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢ ᠳᠦ ᠮᠡᠳᠡᠭᠡ ᠵᠠᠩᠭᠢ ᠬᠠᠩᠭᠠᠬᠤ ᠪᠠᠷ ᠪᠠᠷᠠᠬᠤ ᠦᠭᠡᠢ ᠂ ᠪᠠᠰᠠ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢ ᠳᠦ ᠬᠡᠷᠡᠭᠯᠡᠵᠦ ᠪᠣᠯᠤᠨ᠎ᠠ ᠳ᠋ᠠᠶᠢᠲ᠋ᠠ ᠬᠥᠮᠥᠷᠭᠡ ᠪᠡᠷ ᠮᠠᠰᠢ ᠣᠯᠠᠨ ᠴᠢᠳᠠᠮᠵᠢ ᠶᠢ ᠬᠠᠩᠭᠠᠨ᠎ᠠ᠄

1. ᠲᠡᠮᠳᠡᠭᠯᠡᠯ ᠤᠨ ᠳᠠᠩᠰᠠ ᠨᠠᠶᠢᠷᠠᠭᠤᠯᠬᠤ ᠴᠠᠭ ᠢ ᠪᠠᠭᠠᠰᠬᠠᠪᠠ
2. ᠲᠡᠮᠳᠡᠭᠯᠡᠯ ᠤᠨ ᠡᠷᠢᠬᠦ ᠴᠠᠭ ᠢ ᠪᠠᠭᠠᠰᠬᠠᠪᠠ
3. ᠠᠮᠢᠳᠤᠯᠢᠭ ᠡᠷᠢᠬᠦ ᠴᠤᠪᠤᠷᠠᠭ᠎ᠠ ᠠᠮᠢᠳᠤᠯᠢᠭ ᠭᠠᠷᠭᠠᠬᠤ ᠳ᠋ᠠᠶᠢᠲ᠋ᠠ ᠶᠢᠨ ᠬᠡᠯᠪᠡᠷᠢ ᠶᠢ ᠬᠠᠩᠭᠠᠨ᠎ᠠ
4. ᠣᠯᠠᠨ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢ ᠬᠠᠮᠲᠤ ᠪᠠᠷ ᠳ᠋ᠠᠶᠢᠲ᠋ᠠ ᠶᠢᠨ ᠬᠥᠮᠥᠷᠭᠡ ᠳᠣᠲᠣᠷᠠᠬᠢ ᠲᠣᠭ᠎ᠠ ᠪᠠᠷᠢᠮᠲᠠ ᠶᠢᠨ ᠲᠡᠮᠳᠡᠭᠯᠡᠯ ᠢ ᠰᠤᠷᠪᠤᠯᠵᠢᠯᠠᠬᠤ ᠶᠢ ᠵᠥᠪᠰᠢᠶᠡᠷᠡᠨ᠎ᠡ

### ᠨᠡᠬᠡᠭᠡᠯᠲᠡ  ᠶᠢᠨ ᠤᠷᠴᠢᠨ ᠲᠤᠭᠤᠷᠢᠨ  ᠤ ᠲᠠᠢᠯᠪᠦᠷᠢᠯᠠᠯᠲᠠ

ᠲᠣᠰ ᠤᠯᠠᠮᠵᠢᠯᠠᠯᠲᠤ ᠮᠣᠩᠭᠣᠯ ᠬᠡᠯᠡᠨ ᠦ ᠰᠤᠷᠤᠯᠴᠠᠬᠤ ᠰᠢᠰᠲ᠋ᠧᠮ ᠨᠢ ᠪᠠᠭ᠎ᠠ ᠬᠡᠯᠪᠡᠷᠢ ᠶᠢᠨ ᠰᠤᠷᠤᠯᠴᠠᠬᠤ ᠰᠢᠰᠲ᠋ᠧᠮ ᠳᠦ ᠪᠠᠭᠲᠠᠨ᠎ᠠ ᠂ ᠮᠡᠷᠭᠡᠵᠢᠯ ᠢ B/S ᠵᠠᠭᠪᠤᠷ ᠲᠤ ᠰᠠᠭᠤᠷᠢᠨ  ᠳᠦ ᠪᠡᠶᠡᠯᠡᠭᠦᠯᠦᠨ᠎ᠡ ᠬᠡᠯᠪᠡᠷᠢ ᠶᠢᠨ Html+JavaScript+Servlet ᠭᠤᠷᠪᠠᠨ ᠳᠠᠪᠬᠤᠷᠭ᠎ᠠ ᠶᠢᠨ ᠨᠡᠭᠡᠭᠡᠯᠲᠡ ᠶᠢᠨ ᠰᠢᠰᠲ᠋ᠧᠮ 〔20〕᠂ WEB ᠰᠠᠪᠠ Tomcat  ᠢ ᠰᠣᠩᠭᠣᠨ ᠬᠡᠷᠡᠭᠯᠡᠵᠤ ᠃ MySQL ᠪᠡᠷ ᠠᠷᠤ ᠲᠠᠪᠴᠠᠩ  ᠤᠨ ᠳ᠋ᠠᠶᠢᠲ᠋ᠠ  ᠶᠢᠨ ᠬᠥᠮᠥᠷᠭᠡ ᠪᠣᠯᠭᠠᠪᠠ᠎ ᠃ ᠡᠢᠮᠦᠷᠭᠦᠦ ᠬᠡᠯᠪᠡᠷᠢ ᠨᠢ ᠭᠣᠣᠯᠳᠠᠭᠤ ᠥᠪᠡᠷ ᠦᠨ ᠥᠷᠲᠡᠭ ᠳᠣᠣᠷ᠎ᠠ ᠂ ᠲᠣᠭᠲᠠᠭᠤᠨ ᠂ ᠨᠠᠶᠢᠳᠠᠪᠤᠷᠢᠲᠤ ᠴᠢᠨᠠᠷ ᠪᠡᠷ ᠴᠢᠨᠭᠭ᠎ᠠ ᠃web ᠭᠤᠷᠪᠠᠨ ᠳᠠᠪᠬᠤᠷᠭᠠᠲᠤ ᠪᠦᠲᠦᠴᠡ ᠶᠢᠨ ᠳᠠᠪᠠᠭᠤᠯᠢᠭ ᠲᠠᠯ᠎ᠠ  ᠶᠢ ᠭᠦᠶᠴᠡᠳ ᠪᠠᠳᠠᠷᠠᠭᠤᠯᠵᠤ᠂ ᠢᠯᠡᠷᠬᠡᠢᠯᠡᠬᠦ ᠳᠠᠪᠬᠤᠷᠭ᠎ᠠ ᠂ ᠠᠵᠢᠯ ᠶᠢᠨ ᠯᠣᠭᠢᠭ ᠤᠨ ᠳᠠᠪᠬᠤᠷᠭ᠎ᠠ ᠂ ᠳ᠋ᠠᠶᠢᠲ᠋ᠠ ᠶᠢᠨ ᠰᠤᠷᠪᠤᠯᠵᠢᠯᠠᠬᠤ ᠳᠠᠪᠬᠤᠷᠭ᠎ᠠ  ᠭᠡᠵᠦ ᠭᠤᠷᠪᠠᠨ ᠳᠠᠪᠬᠤᠷᠭ᠎ᠠ ᠪᠣᠯᠭᠠᠨ ᠰᠠᠯᠭᠠᠵᠤ ᠂ ᠰᠢᠰᠲ᠋ᠧᠮ  ᠤᠨ ᠬᠠᠮᠠᠭᠠᠯᠠᠵᠤ ᠪᠣᠯᠬᠤ ᠴᠢᠨᠠᠷ ᠪᠠ ᠥᠷᠭᠡᠳᠬᠡᠵᠦ ᠪᠣᠯᠬᠤ ᠴᠢᠨᠠᠷ ᠵᠢ ᠳᠡᠭᠡᠭᠰᠢᠯᠡᠭᠦᠯᠵᠡᠢ ᠃

ᠲᠣᠰ ᠤᠯᠠᠮᠵᠢᠯᠠᠯᠲᠤ ᠮᠣᠩᠭᠣᠯ ᠬᠡᠯᠡᠨ ᠦ ᠰᠤᠷᠤᠯᠴᠠᠬᠤ ᠰᠢᠰᠲ᠋ᠧᠮ  ᠤᠨ ᠦᠢᠯᠡᠴᠢᠯᠡᠬᠦ ᠣᠷᠴᠢᠨ ᠨᠢ ᠄ Windows10+JDK1.8+Tomcat8+javaee+MySQL5.6

### ᠨᠡᠬᠡᠭᠡᠯᠲᠡ  ᠶᠢᠨ ᠤᠷᠴᠢᠨ ᠲᠤᠭᠤᠷᠢᠨ  ᠤ ᠵᠤᠬᠢᠶᠠᠨ ᠪᠠᠢᠭᠤᠯᠤᠯᠲᠠ

#### JDK ᠤᠭᠰᠠᠷᠠᠬᠤ

JDK ᠪᠣᠯ Java ᠨᠡᠭᠡᠭᠡᠨ ᠬᠥᠭᠵᠢᠭᠦᠯᠬᠦ ᠰᠠᠭᠤᠷᠢ ᠪᠠᠭᠠᠵᠢ ᠬᠡᠷᠡᠭᠰᠡᠯ ᠪᠣᠯᠤᠨ᠎ᠠ ᠃ ᠲᠣᠰ ᠰᠡᠳᠦᠪ ᠢ JDK1.8ᠶᠢ ᠰᠣᠩᠭᠣᠵᠤ ᠂ ᠤᠭᠰᠠᠷᠠᠵᠤ ᠪᠠᠷᠠᠭᠰᠠᠨ ᠤ ᠳᠠᠷᠠᠭ᠎ᠠ ᠬᠡᠷᠡᠭᠰᠡᠬᠦ ᠰᠢᠰᠲ᠋ᠧᠮ ᠦᠨ ᠣᠷᠴᠢᠨ ᠲᠣᠭᠣᠷᠢᠨ ᠤ ᠬᠤᠪᠢᠰᠤᠭᠴᠢ ᠬᠡᠮᠵᠢᠭᠳᠡᠬᠦᠨ ᠨᠢ ᠳᠣᠣᠷᠠᠬᠢ ᠮᠡᠲᠦ᠄

JAVA\_HOME: /Javajdk1.8;

CLASS\_PATH:%JAVA\_HOME%;lib/tools.jar ; %JAVA\_HOME% dt. jar ;

PATH᠄ % JAVA\_HOME% bin ;

#### Tomcat ᠤᠭᠰᠠᠷᠠᠬᠤ

ᠲᠣᠰ ᠰᠢᠰᠲ᠋ᠧᠮ ᠦᠨ ᠰᠣᠩᠭᠣᠨ ᠬᠡᠷᠡᠭᠯᠡᠬᠦ ᠠᠪᠴᠢᠭᠤᠯᠬᠤ ᠠᠮᠫᠧᠷ ᠪᠠᠷᠯᠠᠬᠤ᠃

ᠨᠢᠭᠡᠳᠦᠭᠡᠷ ᠠᠯᠬᠤᠮ ᠄ ( ᠳᠠᠷᠤᠯᠲᠠ ᠲᠠᠶᠢᠯᠬᠤ  ᠪᠠᠷ ) ᠤᠭᠰᠠᠷᠠᠭᠰᠠᠨ ( ᠳᠠᠷᠤᠴᠠ ᠲᠠᠶᠢᠯᠬᠤ ) ᠳᠠᠭᠤᠰᠤᠭᠰᠠᠨ ᠤ ᠳᠠᠷᠠᠭ᠎ᠠ ᠵᠢᠷᠤᠭ 2.4  ᠳᠤ ᠢᠯᠡᠷᠬᠡᠶᠢᠯᠡᠭᠰᠡᠨ ᠮᠡᠲᠦ ᠃ ᠬᠣᠶᠠᠳᠤᠭᠠᠷ ᠪᠦᠯᠦᠭ ᠰᠡᠳᠦᠪ  ᠦᠳ ᠬᠠᠮᠢᠶ᠎ᠠ ᠪᠦᠬᠦᠢ ᠮᠡᠷᠭᠡᠵᠢᠯ ᠦᠨ ᠲᠠᠨᠢᠯᠴᠠᠭᠤᠯᠭ᠎ᠠ ᠬᠢᠭᠡᠳ ᠣᠷᠴᠢᠨ ᠲᠣᠭᠣᠷᠢᠨ ᠢ ᠪᠠᠶᠢᠭᠤᠯᠬᠤ ᠵᠢᠷᠤᠭ 2.4 ᠳᠠᠷᠤᠯᠲᠠ ᠶᠢ ᠲᠠᠶᠢᠯᠤᠭᠰᠠᠨ ᠤ ᠳᠠᠷᠠᠭᠠᠬᠢ Tomcat ᠭᠠᠷᠴᠠᠭ ᠲᠡᠭᠦᠨ ᠦ ᠳᠣᠲᠣᠷᠠᠬᠢ wabapps ᠦᠨ ᠭᠠᠷᠴᠠᠭ ᠪᠣᠯ ᠳᠤᠭᠤᠶ ᠮᠡᠳᠡᠷᠡᠭᠰᠡᠨ ᠥᠷᠲᠡᠭᠡ ᠴᠡᠭ ᠣᠨ ᠦᠨᠳᠦᠰᠦᠨ ᠭᠠᠷᠴᠠᠭ ᠂ ᠨᠠᠶᠢᠷᠠᠭᠤᠯᠤᠨ ᠣᠷᠴᠢᠭᠤᠯᠤᠭᠰᠠᠨ ᠤ ᠳᠠᠷᠠᠭᠠᠬᠢ ᠰᠦᠯᠵᠢᠶ᠎ᠡ ᠨᠢ ᠵᠠᠪᠠᠯ ᠠᠦ᠋ᠲ᠋ᠣ᠋ ᠪᠤᠶᠤ ᠭᠠᠷ ᠢᠶᠠᠷ ᠬᠥᠳᠡᠯᠭᠡᠬᠦ ᠬᠡᠷᠡᠭᠲᠡᠶ᠃ᠲᠣᠰ ᠭᠠᠷᠴᠠᠭ ᠲᠤ ᠬᠦᠷᠪᠡᠯ ᠰᠠᠶ᠋ᠢ Tomcat ᠳ᠋ᠦ ᠬᠠᠮᠢᠶᠠᠷᠤᠭᠳᠠᠨ᠎ᠠ ᠃ bin ᠪᠠ lib ᠮᠠᠲ᠋ᠧᠷᠢᠶᠠᠯ ᠤᠨ ᠬᠠᠪᠴᠢᠭᠤᠷ ᠳᠣᠲᠣᠷ᠎ᠠ ᠲᠤᠰ ᠲᠤᠰ Tomcat  ᠤᠨ ᠬᠡᠷᠡᠭᠵᠢᠭᠦᠯᠵᠦ ᠪᠣᠯᠬᠤ ᠫᠷᠤᠭ᠍ᠷᠠᠮ ᠪᠠ ᠲᠦᠰᠢᠭᠯᠡᠭᠰᠡᠨ jar ᠪᠠᠭᠯᠠᠭ᠎ᠠ ᠂ Tomcat ᠲᠣᠬᠢᠷᠠᠭᠤᠯᠤᠭᠰᠠᠨ ᠪᠢᠴᠢᠭ ᠮᠠᠲ᠋ᠧᠷᠢᠶᠠᠯ ᠨᠢ conf ᠭᠠᠷᠴᠠᠭ ᠤᠨ ᠳᠣᠣᠷ᠎ᠠ ᠣᠷᠣᠰᠢᠵᠤ ᠪᠠᠢᠨ᠎ᠠ ᠃ Work ᠮᠠᠲ᠋ᠧᠷᠢᠶᠠᠯ ᠤᠨ ᠬᠠᠪᠴᠢᠭᠤᠷ ᠤᠨ ᠳᠣᠸᠷ᠎ᠠ ᠬᠠᠳᠠᠭᠠᠯᠠᠬᠤ ᠰᠦᠯᠵᠢᠶᠡᠨ ᠳᠡᠭᠡᠷ᠎ᠡ ᠣᠷᠴᠢᠭᠤᠯᠤᠨ ᠭᠠᠷᠭᠠᠭᠰᠠᠨ ᠲᠦᠷ ᠴᠠᠭ  ᠤᠨ ᠪᠢᠴᠢᠭ ᠮᠠᠲ᠋ᠧᠷᠢᠶᠠᠯ ᠪᠣᠯᠤᠨ᠎ᠠ ᠃ ᠵᠢᠷᠤᠭ 2.5 Tomcat ᠲᠡᠷᠢᠭᠦᠨ ᠨᠢᠭᠤᠷ

ᠬᠤᠶᠠᠳᠤᠭᠠᠷ ᠠᠯᠬᠤᠮ ᠄ ᠡᠬᠢᠯᠡᠭᠦᠯᠬᠦ

apache-tomcat-8.5.31\bin\startup.bat ᠵᠢ ᠳᠠᠷᠤᠪᠴᠢᠯᠠᠬᠤ ᠪᠡᠷ ᠳᠠᠮᠵᠢᠨ Tomcat ᠦᠶᠯᠡᠴᠢᠯᠡᠭᠡ ᠶᠢ ᠡᠬᠢᠯᠡᠭᠦᠯᠦᠨ᠎ᠡ᠃ ᠬᠠᠢᠭᠤᠷ ᠳᠣᠲᠣᠷ《http://localhost:8080》 ᠶᠢ ᠰᠤᠷᠪᠤᠯᠵᠢᠯᠠᠵᠤ ᠂ 2.5 ᠳ᠋ᠥ ᠢᠯᠡᠷᠬᠡᠶᠢᠯᠡᠭᠰᠡᠨ ᠨᠢᠭᠤᠷ ᠢᠯᠡᠷᠡᠪᠡᠯ᠂ Tomcat ᠲᠣᠬᠢᠷᠠᠭᠤᠯᠤᠯᠲᠠ ᠠᠮᠵᠢᠯᠲᠠ ᠣᠯᠪᠠ ᠃

ᠭᠤᠷᠪᠠᠳᠤᠭᠠᠷ ᠠᠯᠬᠤᠮ ᠄ tomcat ᠡᠴᠡ ᠪᠤᠴᠠᠨ ᠭᠠᠷᠬᠤ

apache-tomcat-8.5.31\bin\shutdown.bat ᠵᠢ ᠳᠠᠷᠤᠬᠤ ᠪᠡᠷ ᠳᠠᠮᠵᠢᠨ ᠂ Tomcat ᠦᠢᠯᠡᠴᠢᠯᠡᠭᠡ ᠵᠢ ᠬᠠᠭᠠᠨ᠎ᠠ᠃

#### Mysql ᠤᠭᠰᠠᠷᠠᠬᠤ

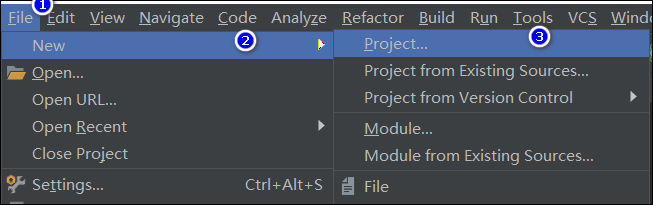
ᠲᠣᠰ ᠰᠢᠰᠲ᠋ᠧᠮ ᠦᠨ ᠬᠡᠷᠡᠭᠯᠡᠵᠦ ᠪᠠᠶᠭ᠎ᠠ MySQL ᠤᠭᠰᠠᠷᠠᠬᠤ ᠪᠣᠭᠴᠣ ᠨᠢ mysql-5.0.27-win64.zip ᠂ ᠳᠠᠷᠤᠯᠲᠠ ᠲᠠᠶᠢᠯᠬᠤ ᠂ ᠠᠵᠢᠯᠯᠠᠬᠤ 《setup.exe》 ᠂ MySQL ᠤᠭᠰᠠᠷᠠᠬᠤ ᠶᠠᠪᠤᠴᠠ ᠶᠢ ᠡᠬᠢᠯᠡᠭᠦᠯᠦᠨ᠎ᠡ ᠃ ᠤᠭᠰᠠᠷᠠᠭᠰᠠᠨ ᠭᠠᠷᠴᠠᠭ ᠨᠢ MySQL/MySQL Server5.6 ᠃ ᠤᠭᠰᠠᠷᠠᠵᠤ ᠪᠠᠷᠠᠭᠰᠠᠨ ᠤ ᠳᠠᠷᠠᠭ᠎ᠠ MySQL ᠬᠠᠮᠢᠶ᠎ᠠ ᠪᠦᠬᠦᠢ ᠫᠠᠷᠠᠮᠧᠲ᠋ᠷ ᠲᠣᠬᠢᠷᠠᠭᠤᠯᠬᠤ ᠬᠡᠷᠡᠭᠲᠡᠶ ᠂ ᠵᠢᠱᠢᠶᠡᠯᠡᠪᠡᠯ ᠦᠢᠯᠡᠴᠢᠯᠡᠭᠦᠷ ᠦᠨ ᠲᠥᠷᠥᠯ ᠵᠦᠶᠯ ᠂ ᠳ᠋ᠠᠶᠢᠲ᠋ᠠ ᠬᠥᠮᠥᠷᠭᠡ ᠶᠢᠨ ᠬᠡᠷᠡᠭᠯᠡᠯᠲᠡ ᠵᠠᠮ ᠳᠤᠮᠳᠠ ᠂ ᠰᠦᠯᠵᠢᠶᠡᠨ ᠥᠷᠲᠡᠭᠡᠨ ᠦ mysql ᠰᠤᠷᠪᠤᠯᠵᠢᠯᠠᠬᠤ ᠬᠡᠮᠵᠢᠶ᠎ᠡ ᠂ TCP/IP  ᠪᠡᠷ ᠵᠠᠯᠭᠠᠬᠤ ᠡᠰᠡᠬᠦ  ᠶᠢᠨ ᠬᠠᠮᠲᠤ ᠦᠵᠦᠭᠦᠷ ᠭᠠᠷᠭᠠᠵᠤ ᠂ ᠳᠤᠭᠤᠶ ᠮᠡᠳᠡᠷᠡᠬᠦ root ᠲᠣᠬᠢᠷᠠᠭᠤᠯᠬᠤ ᠡᠰᠡᠬᠦ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢ ︵ root ︶ ᠵᠢᠨ ᠨᠢᠭᠤᠴᠠ ᠨᠣᠮᠧᠷ ︵root︶ ᠵᠡᠷᠭᠡ ᠶᠢ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢ ᠪᠣᠳᠠᠲᠤ ᠪᠠᠶᠢᠳᠠᠯ ᠢᠶᠠᠨ ᠦᠨᠳᠦᠰᠦᠯᠡᠨ ᠵᠠᠰᠠᠵᠤ ᠪᠣᠯᠤᠨ᠎ᠠ ᠃

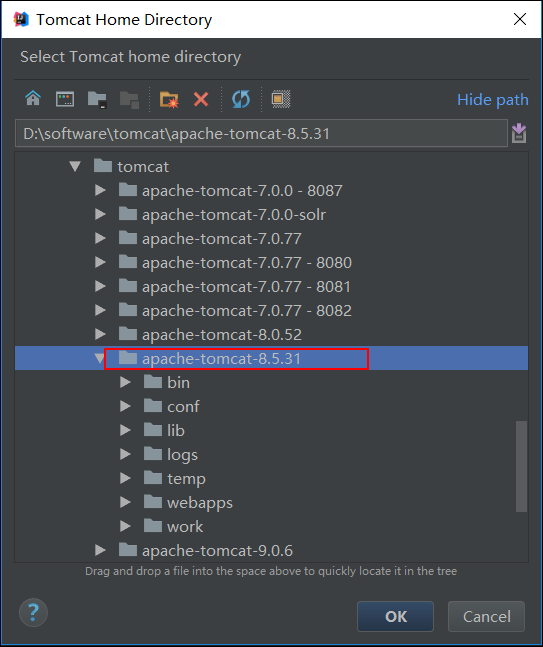
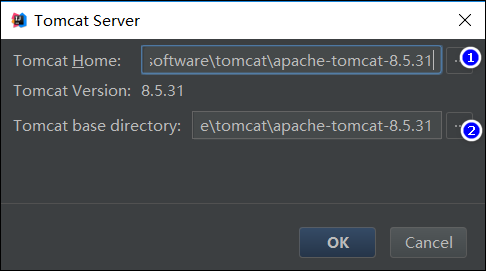
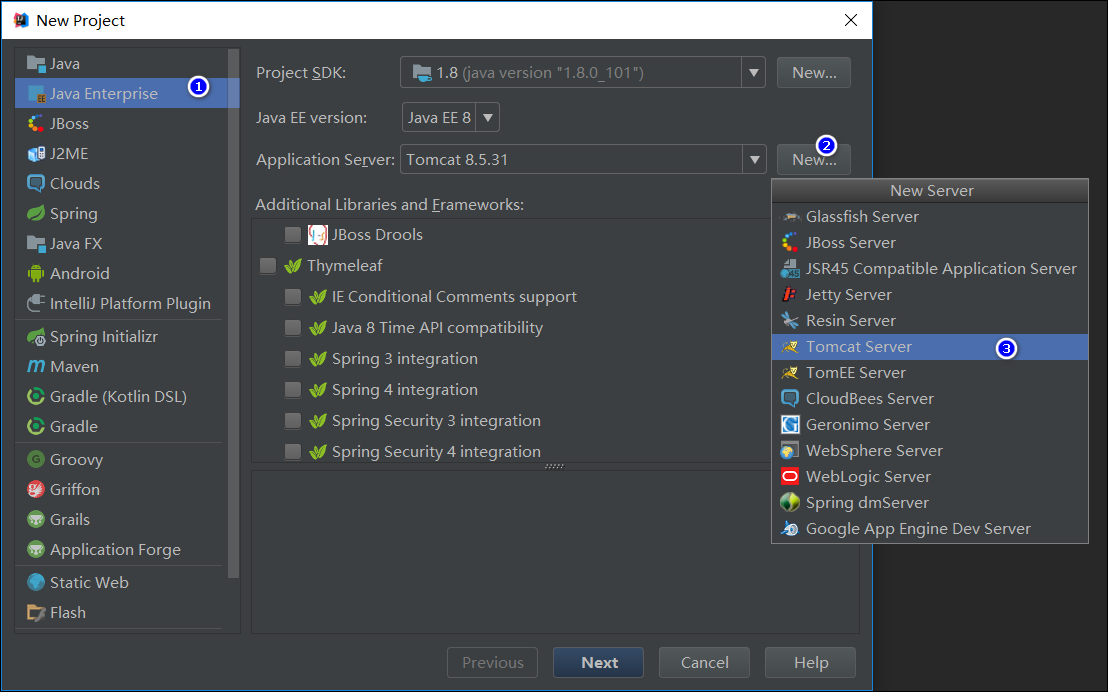
#### IntelliJ IDEA ᠤᠭᠰᠠᠷᠠᠬᠤ

#### IntelliJ IDEA ᠲᠦᠭᠦᠷᠵᠢᠭᠦᠯᠬᠦ

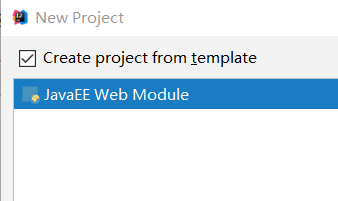
ᠶᠠᠪᠤᠴᠠ᠄

ᠨᠢᠭᠡᠳᠦᠭᠡᠷ ᠠᠯᠬᠤᠮ᠂ File — New— Project



ᠬᠣᠶᠠᠳᠤᠭᠠᠷ ᠠᠯᠬᠤᠮ᠂ Java Enterprise ᠬᠡᠪᠯᠡᠯ ᠢ ᠰᠣᠩᠭᠣᠵᠤ ᠂ ᠳᠠᠷᠠᠭ᠎ᠠ ᠨᠢ tomcat ᠲᠣᠬᠢᠷᠠᠭᠤᠯᠤᠨ᠎ᠠ 

ᠭᠤᠷᠪᠠᠳᠤᠭᠠᠷ ᠠᠯᠬᠤᠮ᠂ ᠵᠠᠭᠪᠤᠷ ᠢ ᠬᠡᠷᠡᠭᠯᠡᠬᠦ ᠲᠥᠷᠥᠯ ᠵᠦᠶᠯ ᠢ ᠰᠣᠩᠭᠣᠨ᠎ᠠ



ᠳᠥᠷᠪᠡᠳᠦᠭᠡᠷ ᠠᠯᠬᠤᠮ᠂ ᠲᠥᠷᠥᠯ ᠵᠦᠶᠯ ᠦᠨ ᠨᠡᠷ᠎ᠡ ᠶᠢ ᠲᠠᠭᠯᠠᠵᠤ ᠂ ᠡᠨᠡ ᠬᠦ web ᠲᠥᠷᠥᠯ ᠵᠦᠶᠯ ᠳᠦ tomcat ᠲᠣᠬᠢᠷᠠᠭᠤᠯᠤᠨ᠎ᠠ᠃



ᠲᠠᠪᠤᠳᠤᠭᠠᠷ ᠠᠯᠬᠤᠮ᠂ ᠡᠭᠦᠳᠦᠨ ᠪᠠᠶᠢᠭᠤᠯᠵᠤ ᠳᠠᠭᠤᠰᠬᠠᠪᠠ

#### ᠰᠦᠯᠵᠢᠶ᠎ᠡ  ᠶᠢᠨ ᠲᠦᠭᠦᠯᠳᠡᠷᠵᠢᠭᠦᠯᠦᠯᠲᠡ

## **ᠭᠤᠷᠪᠠᠳᠤᠭᠠᠷ ᠪᠦᠯᠦᠭ** ᠰᠢᠰᠲᠸᠮ  ᠤᠨ ᠶᠡᠷᠤᠨᠭᠬᠡᠢ ᠲᠦᠯᠦᠪᠯᠡᠯ

### ᠰᠢᠰᠲᠸᠮ  ᠤᠨ ᠬᠡᠷᠡᠭᠴᠡᠭᠡᠨ  ᠤ ᠵᠠᠳᠠᠯᠤᠯᠲᠠ

ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢᠳ  ᠤᠨ ᠲᠠᠯ᠎ᠠ ᠡᠴᠡ ᠠᠪᠴᠤ ᠬᠡᠯᠡᠪᠡᠯ᠂

1. ᠺᠢᠷᠢᠯ ᠦᠰᠦᠭ ᠲᠠᠢ ᠬᠠᠷᠠᠭᠠᠯᠵᠠᠭᠰᠠᠨ ᠤᠯᠠᠮᠵᠢᠯᠠᠯᠲᠤ ᠮᠤᠨᠭᠭᠤᠯ ᠦᠰᠦᠭ  ᠤᠨ ᠳᠠᠭᠤᠳᠠᠯᠭ᠎ᠠ ᠂ ᠤᠨᠭᠰᠢᠯᠭ᠎ᠠ ᠬᠢᠭᠡᠳ ᠪᠢᠴᠢᠯᠭᠡ ᠵᠢ ᠨᠢ ᠬᠠᠨᠭᠭᠠᠨ᠎ᠠ᠃
2. ᠰᠤᠷᠤᠯᠴᠠᠵᠤ ᠪᠠᠷᠠᠭᠰᠠᠨ  ᠤ ᠳᠠᠷᠠᠭ᠎ᠠ ᠂ ᠳᠠᠪᠲᠠᠨ ᠪᠠᠲᠤᠳᠬᠠᠬᠤ ᠦᠢᠯᠡᠳᠦᠯ ᠬᠠᠨᠭᠭᠠᠨ᠎ᠠ᠃
3. ᠳᠠᠨᠭᠰᠠᠯᠠᠭᠰᠠᠨ  ᠤ ᠳᠠᠷᠠᠭ᠎ᠠ

### ᠰᠢᠰᠲᠸᠮ  ᠤᠨ ᠲᠦᠰᠦᠪᠯᠡᠭᠰᠡᠨ ᠬᠠᠷᠠᠯᠲᠠ

* 1. ᠰᠢᠰᠲᠸᠮ  ᠤᠨ ᠲᠤᠬᠠᠢᠯᠠᠭᠰᠠᠨ ᠠᠵᠢᠯ  ᠤᠨ ᠵᠠᠭᠪᠤᠷ ᠪᠠᠢᠭᠤᠯᠬᠤ

#### ᠵᠢᠱᠢᠶᠡᠲᠦ ᠵᠢᠷᠤᠭ

#### ᠴᠠᠭ  ᠤᠨ ᠳᠠᠷᠠᠭᠠᠯᠠᠯ  ᠤᠨ ᠵᠢᠷᠤᠭ

### ᠶᠡᠷᠤᠨᠭᠬᠡᠢ ᠪᠦᠷᠢᠯᠳᠤᠴᠡ  ᠶᠢᠨ ᠲᠦᠰᠦᠪᠯᠡᠭᠡ

* 1. ᠶᠡᠷᠤᠨᠭᠬᠡᠢ ᠴᠢᠳᠠᠮᠵᠢ  ᠶᠢᠨ ᠬᠡᠰᠡᠭ  ᠤᠨ ᠲᠦᠰᠦᠪᠯᠡᠭᠡ

#### ᠡᠩ  ᠤᠨ ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢᠳ  ᠤᠨ ᠬᠡᠰᠡᠭ  ᠤᠨ ᠲᠦᠰᠦᠪᠯᠡᠭᠡ

#### ᠬᠠᠮᠢᠶᠠᠷᠤᠭᠴᠢ  ᠤᠨ ᠬᠡᠰᠡᠭ  ᠤᠨ ᠲᠦᠰᠦᠪᠯᠡᠭᠡ

#### ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢᠳ ᠤᠨ ᠰᠤᠷᠤᠯᠴᠠᠯᠭ᠎ᠠ  ᠶᠢᠨ ᠠᠵᠢᠯᠯᠠᠭ᠎ᠠ  ᠤᠨ ᠬᠠᠮᠢᠶᠠᠷᠤᠯᠲᠠ

## **ᠲᠦᠷᠪᠡᠳᠦᠭᠡᠷ ᠪᠦᠯᠦᠭ** ᠰᠢᠰᠲᠸᠮ  ᠤᠨ ᠨᠠᠷᠢᠨ ᠲᠦᠰᠦᠪᠯᠡᠭᠡ

### ᠳᠠᠢᠲ᠋ᠠ  ᠶᠢᠨ ᠬᠦᠮᠦᠷᠭᠡ  ᠶᠢᠨ ᠲᠦᠰᠦᠪᠯᠡᠭᠡ

#### 4.1.1    ᠳᠠᠢᠲ᠋ᠠ  ᠶᠢᠨ ᠬᠦᠮᠦᠷᠭᠡ  ᠶᠢᠨ ᠬᠦᠰᠦᠨᠦᠭ  ᠤᠨ ᠲᠦᠰᠦᠪᠯᠡᠭᠡ

#### ᠬᠦᠰᠦᠨᠦᠭ ᠦᠨ ᠬᠠᠷᠢᠴᠠᠭᠠᠨ ᠤ ᠲᠥᠰᠦᠪᠯᠡᠯ

### ᠳᠠᠨᠭᠰᠠᠯᠠᠬᠤ ᠬᠢᠭᠡᠳ ᠨᠡᠪᠲᠡᠷᠡᠬᠦ

### ᠬᠡᠷᠡᠭᠯᠡᠭᠴᠢᠳ  ᠶᠢᠨ ᠰᠤᠷᠤᠯᠴᠠᠯᠭ᠎ᠠ  ᠶᠢᠨ ᠠᠵᠢᠯᠯᠭ᠎ᠠ  ᠶᠢᠨ ᠬᠠᠮᠢᠶᠠᠷᠤᠯᠲᠠ

* 1. ᠬᠠᠮᠢᠶᠠᠷᠤᠭᠴᠢ

## ᠳᠦᠨᠭᠨᠡᠯᠲᠡ᠄

## ᠯᠠᠪᠯᠠᠯᠲᠡ  ᠶᠢᠨ ᠰᠤᠷᠪᠤᠯᠵᠢ ᠪᠢᠴᠢᠭ᠄