**1.platform application architecture**

client | server

**2.network communication**

①layer:interface network transport application

②protocol:mac ip tcp/udp http

③packet:mac frame(mac) ip packet(ip) tcp/udp packet(port) http packet

**3.source code/program structure**

①API/driver/runtime:underlying function/class

②library/package/module/framework/engine:base function/class

③declaration&implementation:specific function/class

④***flow***:entry function/class

**4.platform language**

c/c++ java c# **perl** **python**

**5.web application architecture**

browser(html/css/javascript) | server(script)

**6.http communication**

①http url

②http request packet

**method** **request-uri** http-version | request-header:value | request-data

③http response packet

http-version status-code reason-phrase | response-header:value | response-data

method:get post put delete

**7.web language**

presentation layer:html css

business layer:javascript flex/acrionscript **php** java-web **python** ruby

data layer:sql

**8.LIB**

shell: source /xx/xx . /xx/xx

perl: require /path/xx use <module> *@INC* perl -V export *PERLLIB/PERL5LIB*=”/xx/xx”

python: import /xx/xx sys.path export PYTHONPATH=”/xx/xx”