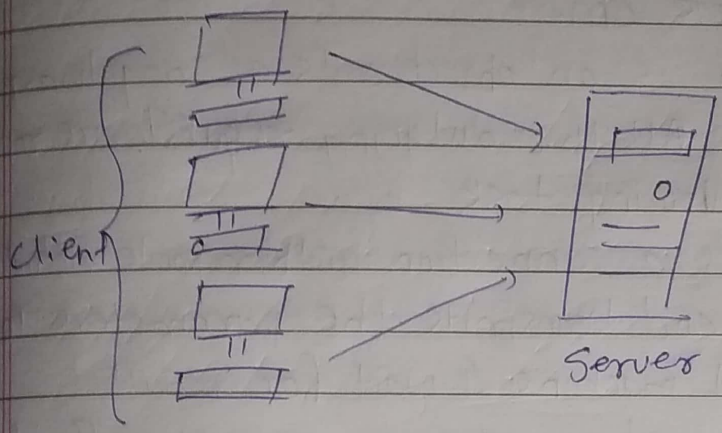
Assignment - 2

Q1 explain client and server model.

→ the web is services that allows computer to share and exchange data.
such as : emailing online gaming f.t.p
-the web is refered to as client server communication



client - client can be a machine or a program
foreg- Laptop, deskstop, mobile
- a client program is a program that allows the user to make request
- A client, whether it is a machine or a program is on applionte and a wat to make requests thrue the web
server - we can run multiple servers on one ~~the~~ Single machine. A server is a computer program Not a devile
- hi qhperformance computer are colled servers because they run server-programs.
- server provide functionality & serve other programs colled client.
- A single server can serve multiple clients at the same time.

Q.2 Explain Java RMI -

→ ① The RMI (Remote method invocation) is an API that provides a mechanism to create distributed application in Java. the RMI allows an object to invoke methods an on object Running in other Jam

② RMI use stub & skeleton object for communicate with the Remote obj.

* stub - the stub is an object acts as a getway for the client side. All the outgoing requests are routed thrue it does the following task

i) it initiates a connection with remote virtual machine

ii) it writes and transmits the parameters to the Remote virtual machine & wait for result

iii) it reads the return value or exception & it finally return to caller.

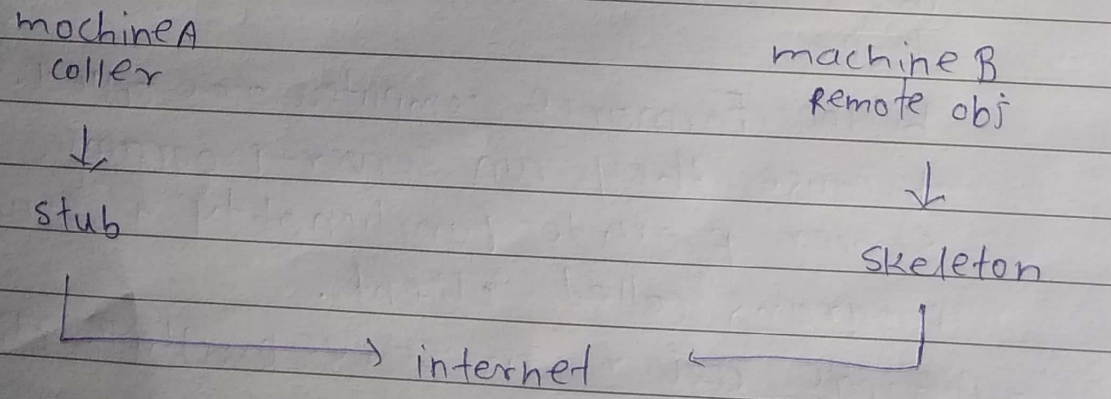
skeleton - the skeleton is an object. acts as a gateway for the server side object for all the incoming results are routed thrue it.

it does following talk

it Reads the parameters for the Remote method

it invoke the method on the actual Remote obj

and it write & thronimths the result to the caller



① object adapter (server) -

bridges the gap between corba objects and the

programming language interfaces for the corba obj
dispaches each RMI to the appropriate servent class via
a skeleton and activates obj
asign & unique name to it self & each obj

(2) skeleton

An IDL compiler generates skeleton classes in
servers language.
Di spatch RMI's to the appropriate servent class

(3) stub -

generated by an IDL compiler in the client
language. a proxy class is created for object oriented
language. stub procedures are created for procedural
language.

(4) implementation Repositery -

Activates resisterd servers on demand and local
servers that are currently running.

(5) interface repository -

it provide info about resistered ideal interefance
to that client & server that reduire it
ophonal for static invocation, required for dynamic
invocation

19 explain microsoft document.

i) it is a remote protocal design by microsoft to invoke
RPCs it consist of a set of exe tesione layered on
two microsoft Remote Procedure code extention

ii) (Dom protocal stack) : higher level applications
are two Dom clients to obtain object reference
or make ORPC calls on the object the
Dom client uses the Remote procedure core
Protocal extention to communicate with two

object server.

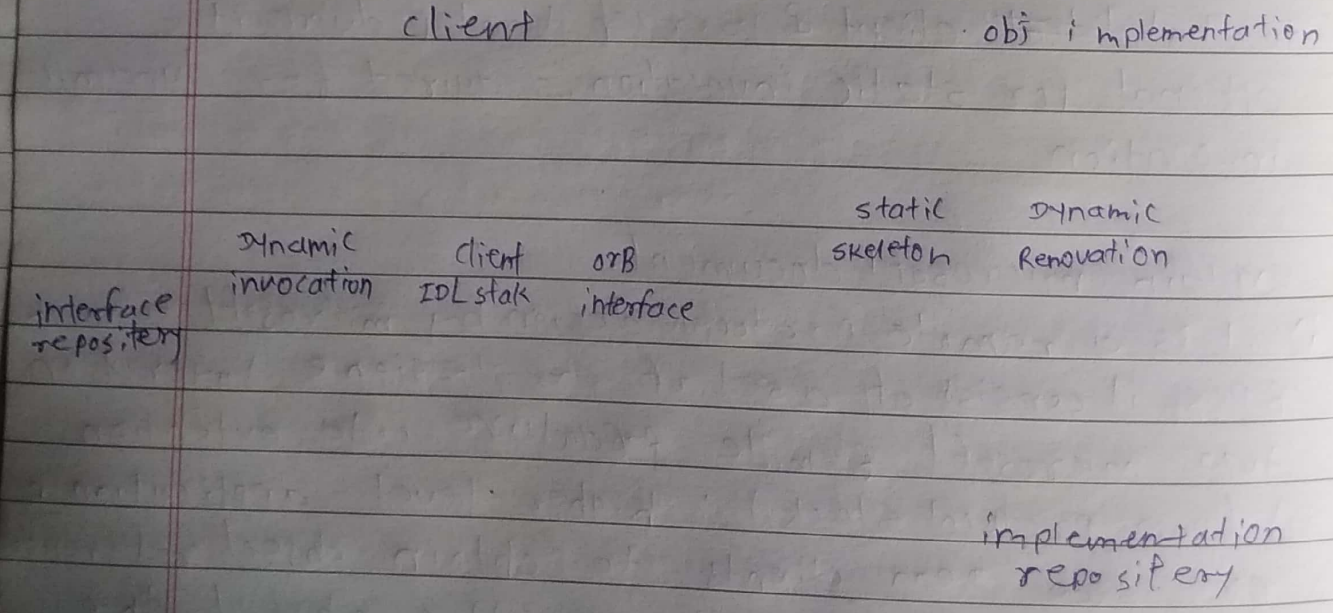
iii) the object server constitutes on object Resolve service and one or more objects experters.

iv) DOM is language and plateform independent DOM is a binary standard. DCOM provides the ability to use and recure components, dynamicaly, without recompiling on plateform and langage neutral principale.

v) However DCOM do not have any absolute way of addressing on object instant everything is done thrue object interface.

Q. 4 explain corba architecture.

→ a collection of system lebel service for handling low level application services like life of two system client and object implementation.



working flow of corba

① ORB core -

① it carries out the request replay protocol betⁿ client & server.

② it provides operations that enable process to be started and stopped.

③ it provides operations to convert betⁿ Remote obj references and string