**Database Connectivity using C/C++**

**Connecting to database and executing simple command:**

#include<stdio.h>

#include <SQLAPI.h> // main SQLAPI++ header

int main(int argc, char\* argv[])

{

SAConnection con; // connection object to connect to database

SACommandcmd; // create command object

try

{

// connect to database (Oracle in our example)

con.Connect("test", "tester", "tester", SA\_Oracle\_Client);

// associate a command with connection

// connection can also be specified in SACommand constructor

cmd.setConnection(&con);

// create table

cmd.setCommandText("create table tbl(id number, name varchar(20));");

cmd.Execute();

// insert value

cmd.setCommandText("Insert into tbl(id, name) values (1,”Vinay”)");

cmd.setCommandText("Insert into tbl(id, name) values (2,”Kushal”)");

cmd.setCommandText("Insert into tbl(id, name) values (3,”Saransh”)");

cmd.Execute();

// commit changes on success

con.Commit();

printf("Table created, row inserted!");

}

catch(SAException &x)

{

// SAConnection::Rollback()

// can also throw an exception

// (if a network error for example),

// we will be ready

try

{

// on error rollback changes

con.Rollback();

}

catch(SAException &)

{

}

// print error message

printf("%s", (const char\*)x.ErrText());

}

return 0;

}

**Executing a simple SQL Command**

Now, we will look out to execute a simple SQL query.Firstly, creating a table for the database:

create table tb1(id number, name varchar(20);

Now, establish the connection to the database then, after your con.connect; method you should use

cmd.setCommandText method to pass the query to the database, it is as shown below:

con.Connect("test", "tester", "tester", SA\_Oracle\_Client);

cmd.setCommandText("create table tb1(id number, name varchar(20));”);

and now, to execute the query we have to use the following command:

cmd.Execute();