Assignment No	4
Title	ORDBMS
Objective	Abstract Data type, Object , member function
Roll No	MCA2511

Query:
create type data_type1 as
object(Year number,
member function Prod(Invest number)
return number);
/
create type body data_type1 is member
function Prod(Invest number) return
number is
begin return(Year+Invest);
end;
end;
/

```
SQL> create type data_type1 as
  2  object(Year number,
  3  member function Prod(Invest number)
  4  return number);
  5  /

Type created.

SQL> create type body data_type1 is member
  2  function Prod(Invest number) return
  3  number is
  4  begin return(Year+Invest);
  5  end;
  6  end;
  7  /

Type body created.
```

create table Data(Col data_type1);

```
SQL> create table Data(Col data_type1);

Table created.
```

insert into Data values(data_type1(2));
insert into Data values(data_type1(5));

```
SQL> insert into Data values(data_type1(2));

1 row created.
```

```
SQL> insert into Data values(data_type1(5));

1 row created.
```

select d.Col.Prod(12) from Data d;

```
SQL> select d.Col.Prod(12) from Data d;

D.COL.PROD(12)
--------------
            14
```

```
SQL> select d.Col.Prod(12) from Data d;

D.COL.PROD(12)
--------------
            14
            17
```

- Creating Object Type "Demo" with attribute "ID" and Function "get_square":

create type Demo as
object(ID number,
member function get_square
return number);
/

```
SQL> create type Demo as
  2  object(ID number,
  3  member function get_square
  4  return number);
  5  /

Type created.
```

- Creating table "Demo_Tbl"

create table
Demo_Tbl(Col Demo);

```
SQL> create table
  2  Demo_Tbl(Col Demo);

Table created.
```

insert into Demo_Tbl values(Demo(3))

```
SQL> insert into Demo_Tbl values(Demo(3));

1 row created.
```

create type body Demo
is member function get_square
return number
is n number;
begin
select s.Col.ID*s.Col.ID into n
from Demo_Tbl s;
return(n);
end;
end;
/

```
SQL> create type body Demo
  2  is member function get_square
  3  return number
  4  is n number;
  5  begin
  6  select s.Col.ID*s.Col.ID into n
  7  from Demo_Tbl s;
  8  return(n);
  9  end;
 10  end;
 11  /

Type body created.
```

select v.Col.get_square() from Demo_Tbl v;

```
SQL> select v.Col.get_square() from Demo_Tbl v;

V.COL.GET_SQUARE()
-------------------
                 9
```

```
create type Name as
object(
FName varchar(10),
LName varchar(10));
/
```

```
SQL> create type Name as
  2  object(
  3  FName varchar(10),
  4  LName varchar(10));
  5  /

Type created.
```

```
create table
Person(PName Name);
```

```
SQL> create table
  2  Person(PName Name);

Table created.
```

insert into Person values(Name('Mukund','Gangurde'));

```
SQL> insert into Person values(Name('Mukund','Gangurde'));

1 row created.
```

desc Person;

```
SQL> desc Person;
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 PNAME                                               NAME
```

select p.PName.FName from Person p;

```
SQL> select p.PName.FName from Person p;

PNAME.FNAM
----------
Mukund
```

select p.PName.FName || ' ' || p.PName.LName from Person p;

```
SQL> select p.PName.FName || ' ' || p.PName.LName from Person p;

P.PNAME.FNAME||''||P.
---------------------
Mukund Gangurde
```

create type Address as
object(
Street varchar(10),
City varchar(10));
/

```
SQL> create type Address as
  2  object(
  3  Street varchar(10),
  4  City varchar(10));
  5  /

Type created.
```

create table
Peoples(
Name Name,
Address Address,
DOB Date);

```
SQL> create table
  2  People(
  3  Name Name,
  4  Address Address,
  5  DOB Date);

Table created.
```

insert into People values(Name('Mukund','Gangurde'),
Address('Thane','Mumbai'),
to_date('02-06-1997','dd-mm-yyyy'));

```
SQL> insert into People values(Name('Mukund','Gangurde'),
  2  Address('Thane','Mumbai'),
  3  to_date('02-06-1997','dd-mm-yyyy'));

1 row created.
```

select * from People;

```
SQL> select * from People;

NAME(FNAME, LNAME)
--------------------------------------------------------------------------------
ADDRESS(STREET, CITY)
--------------------------------------------------------------------------------
DOB
---------
NAME('Mukund', 'Gangurde')
ADDRESS('Thane', 'Mumbai')
02-JUN-97
```

select pd.Name.FName || ' ' || pd.Name.LName from People pd;

```
SQL> select pd.Name.FName || ' ' || pd.Name.LName from People pd;

PD.NAME.FNAME||''||PD
---------------------
Mukund Gangurde
```

select pd.Address.Street || ' ' || pd.Address.City from People pd;

```
SQL> select pd.Address.Street || ' ' || pd.Address.City from People pd;

PD.ADDRESS.STREET||''
---------------------
Thane Mumbai
```

select Dob from People;

```
SQL> select Dob from People;

DOB
---------
02-JUN-97
```