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| **0EX.NO:** | **9** | **Procedures and Functions** |
| **DATE :** |  |

**Queries to be completed :**

**Add two numbers:**

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| --- |
| declare  a integer(3):=&a;  b integer(3):=&b;  sum integer(5);  begin  sum:=a+b;  insert into simple\_qur(a\_val,b\_val,sum) values(a,b,sum);  end; |

**find odd or even:**

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| declare  a integer(10):=&a;  temp varchar(3);  begin  if a mod 2 = 0 then  temp:='yes';  else  temp:='no';  end if;  update simple\_qur set o\_e =temp;  end; |

**Armstrong number**

|  |
| --- |
| declare  n number:=&n;  s number:=0;  r number;  len number;  m number;  temp varchar(3);  begin  m := n;  while n>0  loop  r := mod(n , 10);  s := s + power(r ,3);  n := trunc(n / 10);  end loop;  if m = s  then  temp:='yes';  else  temp:=('no');  end if;  update simple\_qur set ams=temp;  end; |

**PL/SQL function to**

**Calculate Factorial**

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| --- |
| declare  fac number :=1;  n number := &n;  begin  while n > 0 loop  fac:=n\*fac;  n:=n-1;  end loop;  dbms\_output.put\_line(fac);  end; |

**Prime Number**

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| --- |
| DECLARE  a NUMBER := 1;  i number :=&i;  BEGIN  if a=2 or a=3 or a=5 or a=7 or a mod 2 <> 0 and a mod 3 <> 0 and a mod 5 <> 0 and a mod 7 <> 0 then  dbms\_output.Put\_line ('the prime number is ' ||a);  else  dbms\_output.Put\_line ('Not the prime number ' ||a);  end if;    END; |

**Palindrome**

|  |
| --- |
| DECLARE  ST Varchar(10) :='&ST';  len number(10);  ST1 varchar(10);  BEGIN  len:=length(st);  for i in reverse 1..len  loop  st1:=st1 || substr(st,i,1);  end loop;  IF ST = ST1 THEN  dbms\_output.Put\_line('IT IS PADALINROME '|| st);  else  dbms\_output.Put\_line('IT IS not PADALINROME '|| st);  end if;  end;  / |

* Consider the employee database of a company, where the company decides to provide promotions for their employees based on their designation and experience.

**Add new column designation and values like manager, Assistant manager etc. Update the designation based on experience. If > 20 – Manager,**

**>15 and <+20 – Asst Manager, >10 and <=15 – Junior Manager, <=10 – Trainee**

|  |
| --- |
| declare  emp\_\_exp emp.emp\_exp%type;  emp\_\_id emp.emp\_id%type;  cursor emp\_cur is select emp\_exp,emp\_id from emp;  begin  open emp\_cur;  loop  fetch emp\_cur into emp\_\_exp,emp\_\_id;  if emp\_\_exp > 20 then  update emp set emp\_des ='Manager' where emp\_id=emp\_\_id;  elsif emp\_\_exp > 15 and emp\_\_exp <= 20 then  update emp set emp\_des ='Asst.Manager' where emp\_id=emp\_\_id;  elsif emp\_\_exp >10 and emp\_\_exp <=15 then  update emp set emp\_des ='Jr.Manager' where emp\_id=emp\_\_id;  elsif emp\_\_exp <=10 then  update emp set emp\_des ='Traniee' where emp\_id=emp\_\_id;  end if;  exit when emp\_cur%notfound;  end loop;  close emp\_cur;  end; |

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**Display the average experience of employees whose salary ranges between 2000 and 50000**

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| declare  sum1 number(10):=0;  avg1 number(10,8);  count1 number(3):=0;  emp\_\_exp emp.emp\_exp%type;  emp\_\_salary emp.emp\_salary%type;  cursor emp\_cur is select emp\_exp,emp\_salary from emp;  begin  open emp\_cur;  loop  fetch emp\_cur into emp\_\_exp,emp\_\_salary;  if emp\_\_salary >=20000 and emp\_\_salary <= 50000 then  count1:=count1+1;  sum1:=sum1+ emp\_\_exp;  end if;  exit when emp\_cur%notfound;  end loop;  close emp\_cur;  avg1:= sum1/count1;  dbms\_output.put\_line('The average experience of the employees between the salary of 20,000 to 50,000 is : ' || avg1);  end; |

**Display a specific employee detail.**

|  |
| --- |
| declare  Name varchar(10):='&Name';  id number(3):=&id;  emp\_\_id emp.emp\_id%type;  emp\_\_name emp.emp\_name%type;  emp\_\_des emp.emp\_des%type;  emp\_\_exp emp.emp\_exp%type;  emp\_\_salary emp.emp\_salary%type;  cursor emp\_cur is select \* from emp;  begin  open emp\_cur;  loop  fetch emp\_cur into emp\_\_id,emp\_\_name,emp\_\_des,emp\_\_exp,emp\_\_salary;  if Name = emp\_\_name and id = emp\_\_id then  dbms\_output.put\_line('Employee Name :'||emp\_\_name);  dbms\_output.put\_line('Employee ID :'||emp\_\_id);  dbms\_output.put\_line('Employee Experience :'||emp\_\_exp);  dbms\_output.put\_line('Employee Designation:'||emp\_\_des);  dbms\_output.put\_line('Employee Salary:'||emp\_\_salary);  end if;  exit when emp\_cur%notfound;  end loop;  close emp\_cur;  end; |