

```

declare
    bijli_units monthly_unit;
    bijli_total number:=0;
    customerid number:=&customerid;
begin
    Select monthly_units into bijli_units from billconsume where
custid=customerid;
    for i in 1..bijli_units.count
    loop
        bijli_total:= bijli_total + bijli_units(i);
    end loop;
    dbms_output.put_line('Total yearly Electricity units ' || bijli_total);
    dbms_output.put_line('Monthly consumption electricity'||bijli_total/12);
    if bijli_total>300 then
        dbms_output.put_line('You already reach to your limit');
    end if;
end;
/

```

SQL*Plus: Release 21.0.0.0.0 - Production on Mon Jan 5 15:44:36 2026
Version 21.3.0.0.0

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Enter user-name: user1/pass1

Last Successful login time: Sun Jan 04 2026 22:53:43 +05:30

Connected to:

Oracle Database 21c Express Edition Release 21.0.0.0.0 - Production
Version 21.3.0.0.0

SQL> Select * from student;

ROLLNO	NAME	MARKS	GRADE
1	aayush	78	B
2	aayushi	87	A
3	Palak	99	A
4	Disha	92	A
5	Vikhyat	42	C
6	Rampal	52	C

6 rows selected.

SQL> edit

C:\Users\Ayush\OneDrive\Desktop\DATA_SCIENTIST\ORACLE_AND_MONGODB\PRACTISE\VARRAY\b
ill11.sql

SQL> edit

C:\Users\Ayush\OneDrive\Desktop\DATA_SCIENTIST\ORACLE_AND_MONGODB\PRACTISE\VARRAY\b

ill1.sql

```
SQL> create type monthly_unit as varray(12) of number;
2 /
```

Type created.

```
SQL> select * from monthly_unit;
select * from monthly_unit
      *
```

ERROR at line 1:

ORA-04044: procedure, function, package, or type is not allowed here

```
SQL> create table billconsume (custid number primary key , cname
varchar(20),monthly_units monthly_unit);
```

Table created.

```
SQL> desc billconsume;
```

Name	Null?	Type
CUSTID	NOT NULL	NUMBER
CNAME		VARCHAR2(20)
MONTHLY_UNITS		MONTHLY_UNIT

```
SQL> insert into
billconsume(1,'aayush',monthly_unit(12,13,21,23,21,23,43,2,3,21,22,34));
insert into billconsume(1,'aayush',monthly_unit(12,13,21,23,21,23,43,2,3,21,22,34))
      *
```

ERROR at line 1:

ORA-00928: missing SELECT keyword

```
SQL> insert into
billconsume(1,'aayush',monthly_unit(12,13,21,23,21,23,43,2,3,21,22,34));
insert into billconsume(1,'aayush',monthly_unit(12,13,21,23,21,23,43,2,3,21,22,34))
      *
```

ERROR at line 1:

ORA-00928: missing SELECT keyword

```
SQL> insert into billconsume
values(1,'aayush',monthly_unit(12,13,21,23,21,23,43,2,3,21,22,34));
insert into billconsume
values(1,'aayush',monthly_unit(12,13,21,23,21,23,43,2,3,21,22,34))
```

*

ERROR at line 1:

ORA-00917: missing comma

```
SQL> insert into billconsume
values(1,'aayush',monthly_unit(12,13,21,23,21,23,43,2,3,21,22,34));
```

1 row created.

```
SQL> select * from billconsume;
```

```
      CUSTID CNAME
-----
MONTHLY_UNITS
-----
          1 aayush
MONTHLY_UNIT(12, 13, 21, 23, 21, 23, 43, 2, 3, 21, 22, 34)
```

```
SQL> select count(*) from billconsume b where exists(Select 1 from
table(b.monthly_units)t where t.column_value=34;
select count(*) from billconsume b where exists(Select 1 from
table(b.monthly_units)t where t.column_value=34
```

*

```
ERROR at line 1:
ORA-00907: missing right parenthesis
```

```
SQL> select count(*) from billconsume b where exists(Select 1 from
table(b.monthly_units)t where t.column_value=34);
```

```
      COUNT(*)
-----
          1
```

```
SQL> select sum(b.monthly_units) from billconsume b where exists(Select 1 from
table(b.monthly_units)t where t.column_value=34);
select sum(b.monthly_units) from billconsume b where exists(Select 1 from
table(b.monthly_units)t where t.column_value=34)
```

*

```
ERROR at line 1:
ORA-00932: inconsistent datatypes: expected NUMBER got USER1.MONTHLY_UNIT
```

```
SQL> select sum(*) from billconsume b where exists(Select 1 from
table(b.monthly_units)t where t.column_value=34);
select sum(*) from billconsume b where exists(Select 1 from table(b.monthly_units)t
where t.column_value=34)
```

*

```
ERROR at line 1:
ORA-00936: missing expression
```

```
SQL> select sum(t.column_value) from billconsume b where exists(Select 1 from
table(b.monthly_units)t where t.column_value=34);
select sum(t.column_value) from billconsume b where exists(Select 1 from
table(b.monthly_units)t where t.column_value=34)
*
```

```
ERROR at line 1:
ORA-00904: "T"."COLUMN_VALUE": invalid identifier
```

```
SQL> select sum(column_value) from billconsume b where exists(Select 1 from
table(b.monthly_units)t where t.column_value=34);
select sum(column_value) from billconsume b where exists(Select 1 from
table(b.monthly_units)t where t.column_value=34)
*
```

```
ERROR at line 1:
ORA-00904: "COLUMN_VALUE": invalid identifier
```

```
SQL> select * from billconsume b where exists(Select 1 from table(b.monthly_units)t
where t.column_value=34);
```

```
      CUSTID CNAME
-----
MONTHLY_UNITS
-----
          1 aayush
MONTHLY_UNIT(12, 13, 21, 23, 21, 23, 43, 2, 3, 21, 22, 34)
```

```
SQL> select sum(monthly_units) from billconsume b where exists(Select 1 from
table(b.monthly_units)t where t.column_value=34);
select sum(monthly_units) from billconsume b where exists(Select 1 from
table(b.monthly_units)t where t.column_value=34)
*
```

```
ERROR at line 1:
ORA-00932: inconsistent datatypes: expected NUMBER got USER1.MONTHLY_UNIT
```

```
SQL> edit
C:\Users\Ayush\OneDrive\Desktop\DATA_SCIENTIST\ORACLE_AND_MONGODB\PRACTISE\VARRAY\b
ill1.sql
```

```
SQL> @
C:\Users\Ayush\OneDrive\Desktop\DATA_SCIENTIST\ORACLE_AND_MONGODB\PRACTISE\VARRAY\b
ill1.sql
Enter value for columnvalue: 1
old   4:          columnvalue number:= &columnvalue;
new   4:          columnvalue number:= 1;
```

```
        Select monthly_units into v_units from billconsume b where custid
exists(Select 1 from table(b.monthly_units)t where t.column_value = columnvalue;
                                                                    *
```

ERROR at line 6:

ORA-06550: line 6, column 68:

PL/SQL: ORA-00920: invalid relational operator

ORA-06550: line 6, column 2:

PL/SQL: SQL Statement ignored

ORA-06550: line 15, column 4:

PLS-00103: Encountered the symbol ";" when expecting one of the following:
if

SQL> edit

C:\Users\Ayush\OneDrive\Desktop\DATA_SCIENTIST\ORACLE_AND_MONGODB\PRACTISE\VARRAY\b
ill1.sql

SQL> @

C:\Users\Ayush\OneDrive\Desktop\DATA_SCIENTIST\ORACLE_AND_MONGODB\PRACTISE\VARRAY\b
ill1.sql

Enter value for columnvalue: 1

old 4: columnvalue number:= &columnvalue;

new 4: columnvalue number:= 1;

```
        Select monthly_units into v_units from billconsume b where custid
exists(Select 1 from table(b.monthly_units)t where t.column_value = columnvalue);
                                                                    *
```

ERROR at line 6:

ORA-06550: line 6, column 68:

PL/SQL: ORA-00920: invalid relational operator

ORA-06550: line 6, column 2:

PL/SQL: SQL Statement ignored

ORA-06550: line 15, column 4:

PLS-00103: Encountered the symbol ";" when expecting one of the following:
if

SQL> edit

C:\Users\Ayush\OneDrive\Desktop\DATA_SCIENTIST\ORACLE_AND_MONGODB\PRACTISE\VARRAY\b
ill1.sql

SQL> @

C:\Users\Ayush\OneDrive\Desktop\DATA_SCIENTIST\ORACLE_AND_MONGODB\PRACTISE\VARRAY\b
ill1.sql

Enter value for customerid: 1

old 4: customerid number:=&customerid;

new 4: customerid number:=1;

end;

*

ERROR at line 15:

ORA-06550: line 15, column 4:

PLS-00103: Encountered the symbol ";" when expecting one of the following:
if

```
SQL> edit
C:\Users\Ayush\OneDrive\Desktop\DATA_SCIENTIST\ORACLE_AND_MONGODB\PRACTISE\VARRAY\b
ill11.sql
```

```
SQL> @
C:\Users\Ayush\OneDrive\Desktop\DATA_SCIENTIST\ORACLE_AND_MONGODB\PRACTISE\VARRAY\b
ill11.sql
```

```
Enter value for customerid: 1
old 4:      customerid number:=&customerid;
new 4:      customerid number:=1;
      select custid,sum(column_value) as v_units from
billconsume,table(monthly_units) where custid=customerid ;
      *
```

```
ERROR at line 6:
ORA-06550: line 6, column 2:
PLS-00428: an INTO clause is expected in this SELECT statement
ORA-06550: line 8, column 22:
PLS-00487: Invalid reference to variable 'V_UNITS'
ORA-06550: line 8, column 2:
PL/SQL: Statement ignored
```

```
SQL> edit
C:\Users\Ayush\OneDrive\Desktop\DATA_SCIENTIST\ORACLE_AND_MONGODB\PRACTISE\VARRAY\b
ill11.sql
```

```
SQL> @
C:\Users\Ayush\OneDrive\Desktop\DATA_SCIENTIST\ORACLE_AND_MONGODB\PRACTISE\VARRAY\b
ill11.sql
```

```
Enter value for customerid: 1
old 4:      customerid number:=&customerid;
new 4:      customerid number:=1;
      select custid,sum(column_value) as customerid,v_units from
billconsume,table(monthly_units) where custid=customerid ;
      *
```

```
ERROR at line 7:
ORA-06550: line 7, column 2:
PLS-00428: an INTO clause is expected in this SELECT statement
ORA-06550: line 9, column 22:
PLS-00487: Invalid reference to variable 'V_UNITS'
ORA-06550: line 9, column 2:
PL/SQL: Statement ignored
```

```
SQL> edit
C:\Users\Ayush\OneDrive\Desktop\DATA_SCIENTIST\ORACLE_AND_MONGODB\PRACTISE\VARRAY\b
```

ill1.sql

SQL> @

C:\Users\Ayush\OneDrive\Desktop\DATA_SCIENTIST\ORACLE_AND_MONGODB\PRACTISE\VARRAY\b
ill1.sql

Enter value for customerid: 1

old 4: customerid number:=&customerid;

new 4: customerid number:=1;

Select monthly_units into v_units from billconsume where custid=customerid;
*

ERROR at line 6:

ORA-06550: line 6, column 9:

PL/SQL: ORA-00932: inconsistent datatypes: expected NUMBER got

USER1.MONTHLY_UNIT

ORA-06550: line 6, column 2:

PL/SQL: SQL Statement ignored

ORA-06550: line 8, column 22:

PLS-00487: Invalid reference to variable 'V_UNITS'

ORA-06550: line 8, column 2:

PL/SQL: Statement ignored

SQL> select * from billconsume;

CUSTID CNAME

MONTHLY_UNITS

1 aayush

MONTHLY_UNIT(12, 13, 21, 23, 21, 23, 43, 2, 3, 21, 22, 34)

SQL> edit

C:\Users\Ayush\OneDrive\Desktop\DATA_SCIENTIST\ORACLE_AND_MONGODB\PRACTISE\VARRAY\b
ill1.sql

SQL> @

C:\Users\Ayush\OneDrive\Desktop\DATA_SCIENTIST\ORACLE_AND_MONGODB\PRACTISE\VARRAY\b
ill1.sql

Enter value for customerid: 1

old 4: customerid number:=&customerid;

new 4: customerid number:=1;

PL/SQL procedure successfully completed.

SQL> set serveroutput on ;

SQL> @

C:\Users\Ayush\OneDrive\Desktop\DATA_SCIENTIST\ORACLE_AND_MONGODB\PRACTISE\VARRAY\b
ill1.sql

Enter value for customerid: 1

```
old 4:      customerid number:=&customerid;
new 4:      customerid number:=1;
Total yearly Electricity units 238
```

PL/SQL procedure successfully completed.

```
SQL> edit
C:\Users\Ayush\OneDrive\Desktop\DATA_SCIENTIST\ORACLE_AND_MONGODB\PRACTISE\VARRAY\b
ill1.sql
```

```
SQL> insert into billconsume
values(2, 'Aman', monthly_unit(32,34,32,34,21,21,12,12,21,32,23,21));
```

1 row created.

```
SQL> @
C:\Users\Ayush\OneDrive\Desktop\DATA_SCIENTIST\ORACLE_AND_MONGODB\PRACTISE\VARRAY\b
ill1.sql
Enter value for customerid: 2
old 5:      customerid number:=&customerid;
new 5:      customerid number:=2;
```

Trigger created.

```
SQL> set serverout on ;
SQL> edit
C:\Users\Ayush\OneDrive\Desktop\DATA_SCIENTIST\ORACLE_AND_MONGODB\PRACTISE\VARRAY\b
ill1.sql
```

```
SQL> @
C:\Users\Ayush\OneDrive\Desktop\DATA_SCIENTIST\ORACLE_AND_MONGODB\PRACTISE\VARRAY\b
ill1.sql
Enter value for customerid: 2
old 4:      customerid number:=&customerid;
new 4:      customerid number:=2;
Total yearly Electricity units 295
```

PL/SQL procedure successfully completed.

```
SQL> select * from billconsume;
```

```
      CUSTID CNAME
-----
MONTHLY_UNITS
-----
      1 aayush
MONTHLY_UNIT(12, 13, 21, 23, 21, 23, 43, 2, 3, 21, 22, 34)

      2 Aman
MONTHLY_UNIT(32, 34, 32, 34, 21, 21, 12, 12, 21, 32, 23, 21)
```



```
SQL> insert into billconsume
values(3, 'Disha', monthly_unit(32,34,32,34,21,21,12,12,21,32,23,28));
Total yearly Electricity units 295
```

1 row created.

```
SQL> @
C:\Users\Ayush\OneDrive\Desktop\DATA_SCIENTIST\ORACLE_AND_MONGODB\PRACTISE\VARRAY\b
ill1.sql
Enter value for customerid: 2
old 4:          customerid number:=&customerid;
new 4:          customerid number:=2;
Total yearly Electricity units 295
```

PL/SQL procedure successfully completed.

```
SQL> @
C:\Users\Ayush\OneDrive\Desktop\DATA_SCIENTIST\ORACLE_AND_MONGODB\PRACTISE\VARRAY\b
ill1.sql
Enter value for customerid: 3
old 4:          customerid number:=&customerid;
new 4:          customerid number:=3;
Total yearly Electricity units 302
You already reach to your limit
```

PL/SQL procedure successfully completed.

```
SQL> edit
C:\Users\Ayush\OneDrive\Desktop\DATA_SCIENTIST\ORACLE_AND_MONGODB\PRACTISE\VARRAY\b
ill1.sql
```

```
SQL> select sount(monthly_units) from billconsume;
select count(monthly_units) from billconsume
*
```

ERROR at line 1:
ORA-00904: "SOUNT": invalid identifier

```
SQL> select count(monthly_units) from billconsume;
select count(monthly_units) from billconsume
*
```

ERROR at line 1:
ORA-00932: inconsistent datatypes: expected - got USER1.MONTHLY_UNIT

```
SQL> select count(monthly_unit) from billconsume;
select count(monthly_unit) from billconsume
*
```

```
ERROR at line 1:
ORA-00904: "MONTHLY_UNIT": invalid identifier
```

```
SQL> edit
C:\Users\Ayush\OneDrive\Desktop\DATA_SCIENTIST\ORACLE_AND_MONGODB\PRACTISE\VARRAY\b
ill1.sql
```

```
SQL> @
C:\Users\Ayush\OneDrive\Desktop\DATA_SCIENTIST\ORACLE_AND_MONGODB\PRACTISE\VARRAY\b
ill1.sql
Enter value for customerid: 3
old   5:          customerid number:=&customerid;
new   5:          customerid number:=3;
          customerid number:=3;
          *
```

```
ERROR at line 5:
ORA-06550: line 5, column 13:
PLS-00103: Encountered the symbol "NUMBER" when expecting one of the following:
:= . ( @ % ; not null range default character
The symbol "." was substituted for "NUMBER" to continue.
```

```
SQL> @
C:\Users\Ayush\OneDrive\Desktop\DATA_SCIENTIST\ORACLE_AND_MONGODB\PRACTISE\VARRAY\b
ill1.sql
Enter value for customerid: 2
old   5:          customerid number:=&customerid;
new   5:          customerid number:=2;
          customerid number:=2;
          *
```

```
ERROR at line 5:
ORA-06550: line 5, column 13:
PLS-00103: Encountered the symbol "NUMBER" when expecting one of the following:
:= . ( @ % ; not null range default character
The symbol "." was substituted for "NUMBER" to continue.
```

```
SQL> edit
C:\Users\Ayush\OneDrive\Desktop\DATA_SCIENTIST\ORACLE_AND_MONGODB\PRACTISE\VARRAY\b
ill1.sql
```

```
SQL> @
C:\Users\Ayush\OneDrive\Desktop\DATA_SCIENTIST\ORACLE_AND_MONGODB\PRACTISE\VARRAY\b
ill1.sql
Enter value for customerid: 3
old   4:          customerid number:=&customerid;
new   4:          customerid number:=3;
          for i in 1..v_units.count
          *
```

```
ERROR at line 7:
ORA-06550: line 7, column 14:
PLS-00201: identifier 'V_UNITS.COUNT' must be declared
ORA-06550: line 7, column 2:
PL/SQL: Statement ignored
```

```
SQL> edit
C:\Users\Ayush\OneDrive\Desktop\DATA_SCIENTIST\ORACLE_AND_MONGODB\PRACTISE\VARRAY\b
ill1.sql
```

```
SQL> @  
C:\Users\Ayush\OneDrive\Desktop\DATA_SCIENTIST\ORACLE_AND_MONGODB\PRACTISE\VARRAY\b  
ill1.sql  
Enter value for customerid: 2  
old   4:          customerid number:=&customerid;  
new   4:          customerid number:=2;  
Total yearly Electricity units 295  
Monthly consumption electricity24.58333333333333333333333333333333
```

PL/SQL procedure successfully completed.

[illegible]

PL/SQL procedure successfully completed.

SQL>