

ORACLE

# Corso APEX – beanTech

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# Chi Sono

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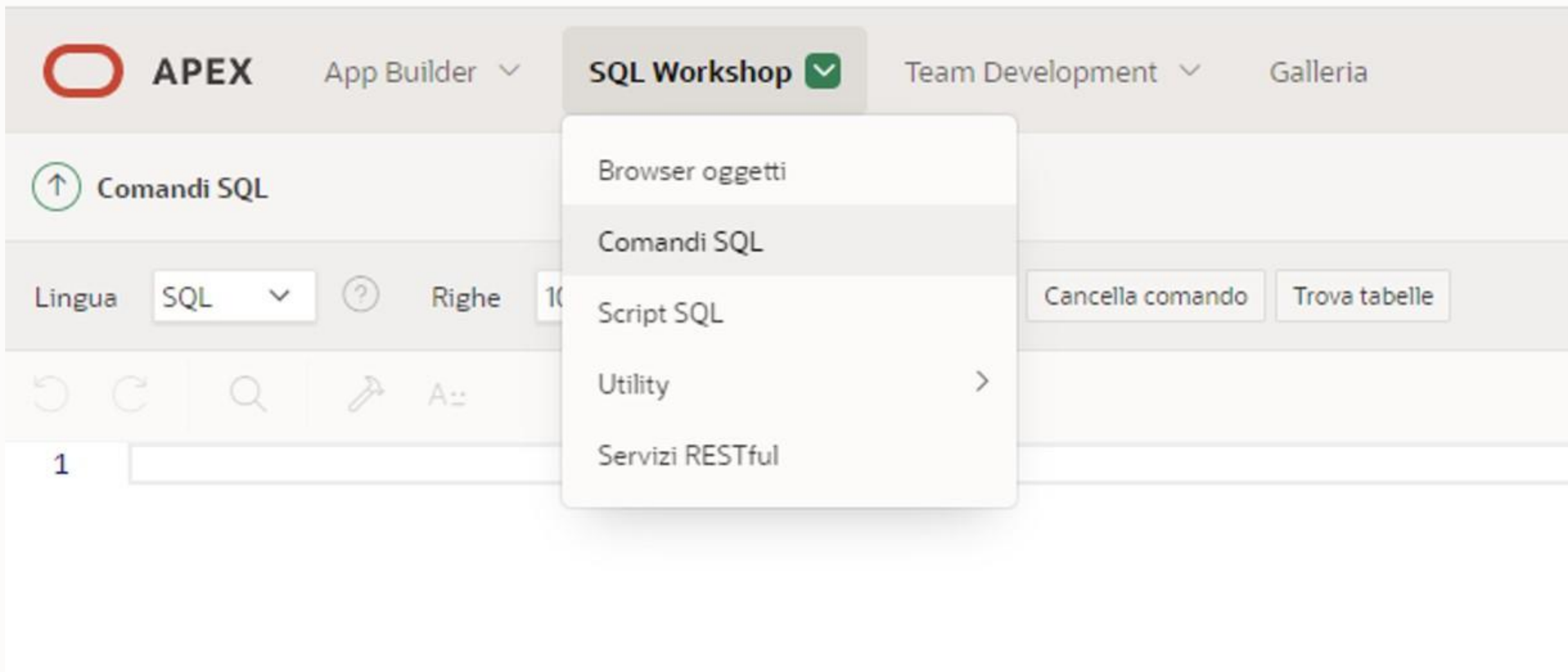
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# Comandi SQL

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## SQL Workshop – Comandi SQL



The screenshot displays the APEX SQL Workshop interface. At the top, the navigation bar includes the APEX logo, 'App Builder', 'SQL Workshop' (selected with a green checkmark), 'Team Development', and 'Galleria'. Below this, the 'Comandi SQL' section is visible, featuring a dropdown menu for 'Lingua' set to 'SQL', a 'Righe' counter showing '10', and buttons for 'Cancella comando' and 'Trova tabelle'. A context menu is open over the 'Comandi SQL' section, listing the following options: 'Browser oggetti', 'Comandi SQL' (highlighted), 'Script SQL', 'Utility' (with a right arrow), and 'Servizi RESTful'. The main workspace area shows a line number '1' and an empty text input field.



# SQL Workshop – Comandi SQL

```
select *
from d06_classifica_ft
```

APEX

App Builder

SQL Workshop

Team Development

Galleria

Cerca

AT

at0

Comandi SQL

Schema AT0

Lingua SQL

Righe 10

Cancella comando

Trova tabelle

Salva

Esegui

1

select \*

2

from d06\_classifica\_ft

3

Risultati

Spiega

Descrivi

SQL salvato

Cronologia

ID	CLASSIFICA	WEB	NOME	NAZIONE	SETTORE	AGR_PERC	CAGR_PERC	REVENUE_2020	REVENUE_2017	DIPENDENTI_2020	DIPENDENTI_2017	ANNO_INIZIO
209	146	https://www.comservice.uno/	Comservice	Italy	Support Services	935,17	117,94	2016300	194780	99	17	2014
210	147	https://www.falcorpresse.it/	Falcor Presse	Italy	Industrial Goods	927,28	117,38	2996770	291720	5	1	2017
211	148	https://roomraccoon.co.uk/	RoomRaccoon	The Netherlands	Technology	927,15	117,38	1715334	167000	40	8	2017
212	149	https://www.signaturit.com/	Signaturit	Spain	Technology	921,07	116,95	5639953	552355	95	37	2013
213	150	https://www.modulrfinance.com/	Modulr	UK	Fintech	914,74	116,5	12789098	1269382	191	31	2015
214	151	https://www.profishop.de/	PROFISHOP	Germany	Ecommerce	909,37	116,11	43812068	4340517	63	17	2012
215	152	https://floer.nl/	Floer	The Netherlands	Interiors	908,11	116,02	2520013	249975	15	2	2015
216	153	https://www.audiosalus.it/	Audiosalus	Italy	Retail	904,15	115,74	1569480	156300	12	4	2011
217	154	https://statsbomb.com/	StatsBomb	UK	Technology	897,81	115,29	2027170	204620	26	2	2016
218	155	https://www.theras-group.com/	Theras Biocare	Italy	Pharmaceuticals	888,84	114,64	26633230	2693390	8	2	2013

Oltre 10 righe disponibili. Aumentare il selettore di righe per visualizzare altre righe.



# SQL Workshop – Comandi SQL

```
select classifica,  
       nome,  
       nazione,  
       settore,  
       revenue_2020,  
       anno_inizio  
from d06_classifica_ft
```

APEX

App Builder

SQL Workshop

Team Development

Galleria

Cerca

AT

ato

FO

EX

Comandi SQL

Schema

ATO

Lingua

SQL

Righe

10

Cancella comando

Trova tabelle

Salva

Esegui

3

4

5

6

7

8

9

10

...

select

classifica,

nome,

nazione,

settore,

revenue\_2020,

anno\_inizio

from

d04\_classifica\_ft

Risultati

Spiega

Descrivi

SQL salvato

Cronologia



# SQL Workshop – Comandi SQL

```
select classifica,  
       nome,  
       nazione,  
       settore,  
       revenue_2020,  
       anno_inizio  
from d06_classifica_ft  
where nazione = 'Italy'
```

APEX

App Builder

SQL Workshop

Team Development

Galleria

Cerca

AT

ato

Comandi SQL

Schema

ATO

Lingua

SQL

Righe

10

Cancella comando

Trova tabelle

Salva

Esegui

↶ ↷ 🔍 📌 A-Z

11

12

13

14

15

16

17

18

19

20

select

classifica,

nome,

nazione,

settore,

revenue\_2020,

anno\_inizio

from

d04\_classifica\_ft

where

nazione = 'Italy'

Risultati

Spiega

Descrivi

SQL salvato

Cronologia

CLASSIFICA	NOME	NAZIONE	SETTORE	REVENUE_2020	ANNO_INIZIO
146	Comservice	Italy	Support Services	2016300	2014
147	Falcor Presse	Italy	Industrial Goods	2996770	2017
153	Audiosalus	Italy	Retail	1569480	2011
155	Theras Biocare	Italy	Pharmaceuticals	26633230	2013
167	Cura Farma	Italy	Health	4436220	2014
172	Componenti Digitali	Italy	Retail	2805850	2017
177	Savalt	Italy	Ecommerce	2108040	2015
184	Multix solutions	Italy	Health	11586460	2015
190	Podium Advanced Technologies	Italy	Automobiles	18025740	2011
193	Soluzione Tasse	Italy	Management Consulting	18939430	2016



# SQL Workshop – Comandi SQL

```
select classifica,  
       nome,  
       nazione,  
       settore,  
       revenue_2020,  
       anno_inizio  
from d06_classifica_ft  
where nazione = 'Italy'  
order by classifica
```

APEX

App Builder

SQL Workshop

Team Development

Galleria

Cerca

AT

at0

FO

EX

Comandi SQL

Schema

ATO

Lingua

SQL

Righe

10

Cancella comando

Trova tabelle

Salva

Esegui

21

22

23

24

25

26

27

28

29

30

select classifica,

nome,

nazione,

settore,

revenue\_2020,

anno\_inizio

from d06\_classifica\_ft

where nazione = 'Italy'

order by classifica

Risultati

Spiega

Descrivi

SQL salvato

Cronologia

CLASSIFICA	NOME	NAZIONE	SETTORE	REVENUE_2020	ANNO_INIZIO
9	Winelivery	Italy	Ecommerce	7337290	2015
13	Datlas*	Italy	Technology	9034926	2017
23	Pegaso Security	Italy	Support Services	8375180	2017
25	Euro Top Brand	Italy	Retail	13888900	2017
31	Credimi	Italy	Financial Services	11301520	2015
40	H.K.Trading	Italy	Retail	5721590	2016
46	CheTariffa.it	Italy	Support Services	2495860	2013
58	Spin Up	Italy	Advertising	4009330	2017
60	Tsunami Nutrition*	Italy	Ecommerce	6945000	2017
65	Eukon	Italy	Health	6393680	2004





# SQL Workshop – Comandi SQL

```
select classifica,  
       nome,  
       nazione,  
       settore,  
       revenue_2020,  
       anno_inizio  
from d06_classifica_ft  
where nazione = 'Italy'  
order by classifica  
fetch next 3 rows only
```

The screenshot displays the APEX SQL Workshop interface. At the top, there's a navigation bar with 'APEX', 'App Builder', 'SQL Workshop', 'Team Development', and 'Galleria'. A search bar is on the right. Below the navigation bar, the 'Comandi SQL' section is active, showing a SQL query editor with the following code:

```
31 select classifica,  
32     nome,  
33     nazione,  
34     settore,  
35     revenue_2020,  
36     anno_inizio  
37 from d04_classifica_ft  
38 where nazione = 'Italy'  
39 order by classifica  
40 fetch next 3 rows only
```

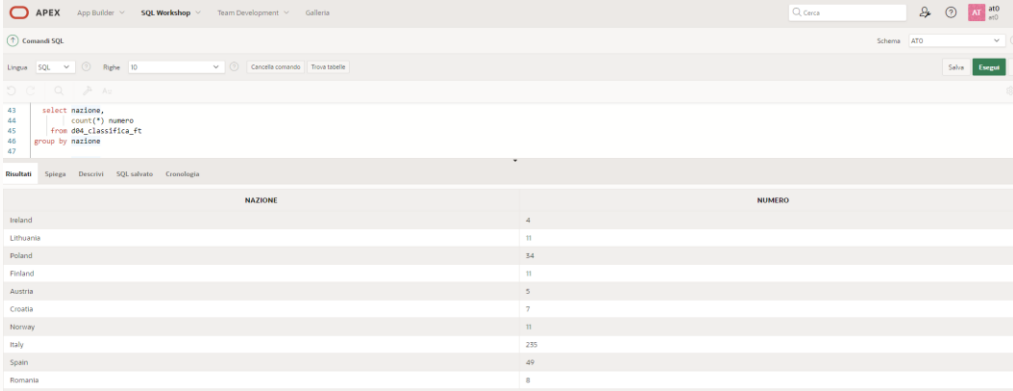
Below the editor, the 'Risultati' (Results) tab is selected, showing a table with 6 columns: CLASSIFICA, NOME, NAZIONE, SETTORE, REVENUE\_2020, and ANNO\_INIZIO. The table contains 3 rows of data:

CLASSIFICA	NOME	NAZIONE	SETTORE	REVENUE_2020	ANNO_INIZIO
9	Winelivery	Italy	Ecommerce	7337290	2015
13	Datlas*	Italy	Technology	9034926	2017
23	Pegaso Security	Italy	Support Services	8375180	2017

At the bottom, it states '3 righe restituite in 0,01 secondi' and provides a 'Scarica' (Download) link.

# SQL Workshop – Comandi SQL

```
select nazione,  
       count(*) as numero  
from d06_classifica_ft  
group by nazione
```



The screenshot shows the APEX SQL Workshop interface. The SQL editor contains the following query:

```
43 select nazione,  
44        count(*) numero  
45 from d06_classifica_ft  
46 group by nazione  
47
```

The results are displayed in a table with two columns: NAZIONE and NUMERO.

NAZIONE	NUMERO
Ireland	4
Lithuania	11
Poland	34
Portugal	11
Austria	5
Croatia	7
Norway	11
Italy	235
Spain	49
Romania	8


```
select count(*) as numero,  
       count(web) as numero_web  
       count(distinct nazione) numero_nazioni  
from d06_classifica_ft
```




Solo valori distinti


Solo valori WEB non nulli





# SQL Workshop – Comandi SQL





```
select nazione,  
       count(*) as numero,  
       sum(revenue_2020) as tot_revenue_2020  
from d06_classifica_ft  
group by nazione
```

 **APEX**

App Builder  SQL Workshop  Team Development  Galleria

 Comandi SQL

Lingua SQL   Righe 10   Cancello comando Trova tabelle

    Az

48 select nazione,  
49 count(\*) numero,  
50 sum(revenue\_2020) tot\_revenue\_2020  
51 from d04\_classifica\_ft  
52 group by nazione

Risultati Spiega Descrivi SQL salvato Cronologia


NAZIONE	NUMERO	TOT_REVENUE_2020
Ireland	4	28547442
Lithuania	11	302388325
Poland	34	1024686129
Finland	11	453841589
Austria	5	78605335
Croatia	7	37807138
Norway	11	327009070
Italy	235	2181377700
Spain	49	1636479612
Romania	8	113843045

Oltre 10 righe disponibili. Aumentare il selettore di righe per visualizzare altre righe.



## SQL Workshop – Comandi SQL

```
select nazione,  
       count(*) as numero,  
       sum(revenue_2020) as tot_revenue_2020,  
       avg(revenue_2020) as media_revenue_2020  
from d06_classifica_ft  
group by nazione  
order by sum(revenue_2020) desc  
fetch next 3 rows only
```



Ordino con una funzione di aggregazione  
(anche se non l'ho messa nella select)

```
select nazione,  
       count(*) as numero,  
       sum(revenue_2020) as tot_revenue_2020,  
       avg(revenue_2020) as media_revenue_2020  
from d06_classifica_ft  
group by nazione  
order by tot_revenue_2020 desc  
fetch next 3 rows only
```

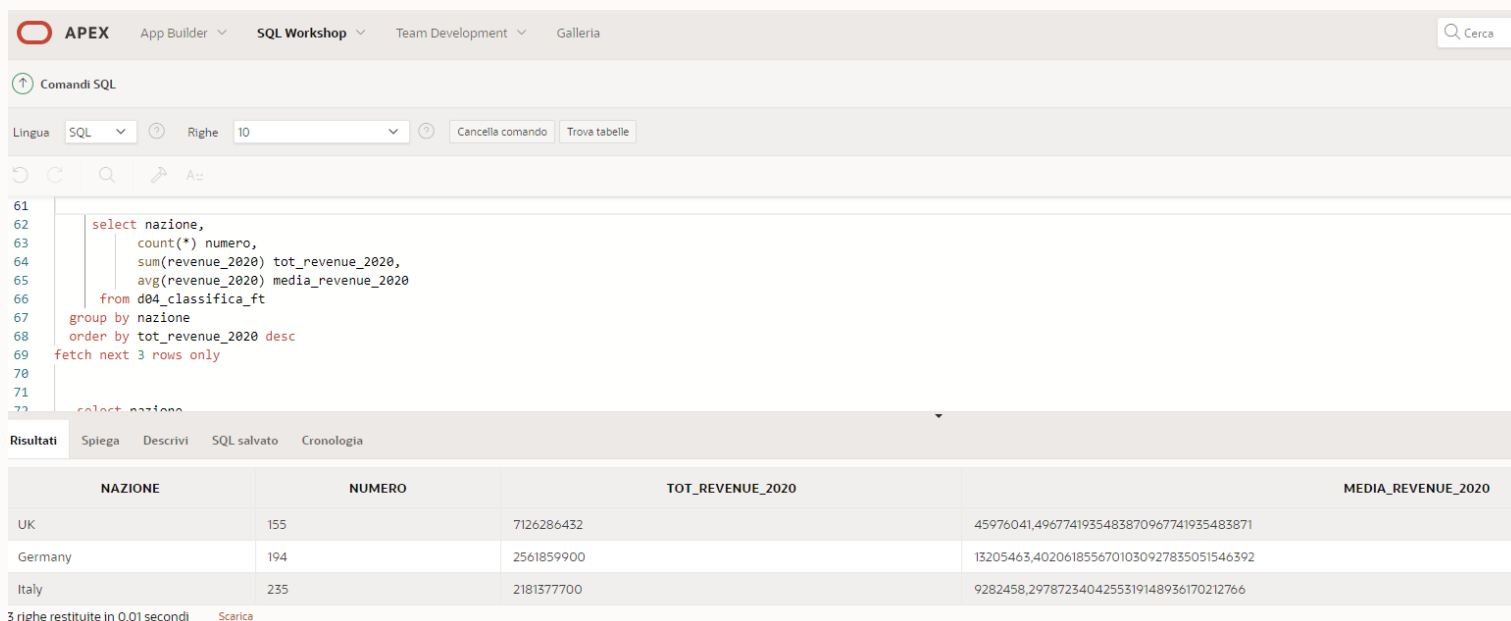


Posso ordinare ANCHE usando l'alias

# SQL Workshop – Comandi SQL

```
select nazione,  
       count(*) as numero,  
       sum(revenue_2020) as tot_revenue_2020,  
       avg(revenue_2020) as media_revenue_2020  
from d06_classifica_ft  
group by nazione  
having sum(revenue_2020) >180000000  
order by tot_revenue_2020 desc
```

NON POSSO usare l'alias per HAVING (forse nel DB oracle 23c)



The screenshot shows the APEX SQL Workshop interface. The top navigation bar includes 'APEX', 'App Builder', 'SQL Workshop', 'Team Development', and 'Galleria'. Below the navigation bar, there's a section for 'Comandi SQL' with a language dropdown set to 'SQL' and a line count of '10'. The main area displays a SQL query with line numbers 61 through 72. The query is identical to the one in the first block. Below the query, there's a 'Risultati' (Results) section with tabs for 'Spiega', 'Descrivi', 'SQL salvato', and 'Cronologia'. The results are displayed in a table with four columns: 'NAZIONE', 'NUMERO', 'TOT\_REVENUE\_2020', and 'MEDIA\_REVENUE\_2020'. The table contains three rows of data for UK, Germany, and Italy. At the bottom, it indicates '3 righe restituite in 0,01 secondi' and a 'Scarica' (Download) button.

```
61  
62 select nazione,  
63        count(*) numero,  
64        sum(revenue_2020) tot_revenue_2020,  
65        avg(revenue_2020) media_revenue_2020  
66 from d04_classifica_ft  
67 group by nazione  
68 order by tot_revenue_2020 desc  
69 fetch next 3 rows only  
70  
71  
72 select nazione
```

NAZIONE	NUMERO	TOT_REVENUE_2020	MEDIA_REVENUE_2020
UK	155	7126286432	45976041,4967741935483870967741935483871
Germany	194	2561859900	13205463,4020618556701030927835051546392
Italy	235	2181377700	9282458,2978723404255319148936170212766

3 righe restituite in 0,01 secondi Scarica



# SQL Workshop – Comandi SQL

```
select nazione,  
       count(*)  
       count(distinct NOME)  
       sum(revenue_2020)  
       max(revenue_2020)  
       round(avg(revenue_2020),2)  
from d06_classifica_ft  
where settore = 'Technology'  
group by nazione  
having sum(revenue_2020) >180000000  
order by tot_revenue_2020 desc  
fetch next 3 rows only
```

```
as numero,  
as num_aziende,  
as tot_revenue_2020,  
as max_revenue_2020,  
as media_revenue_2020
```

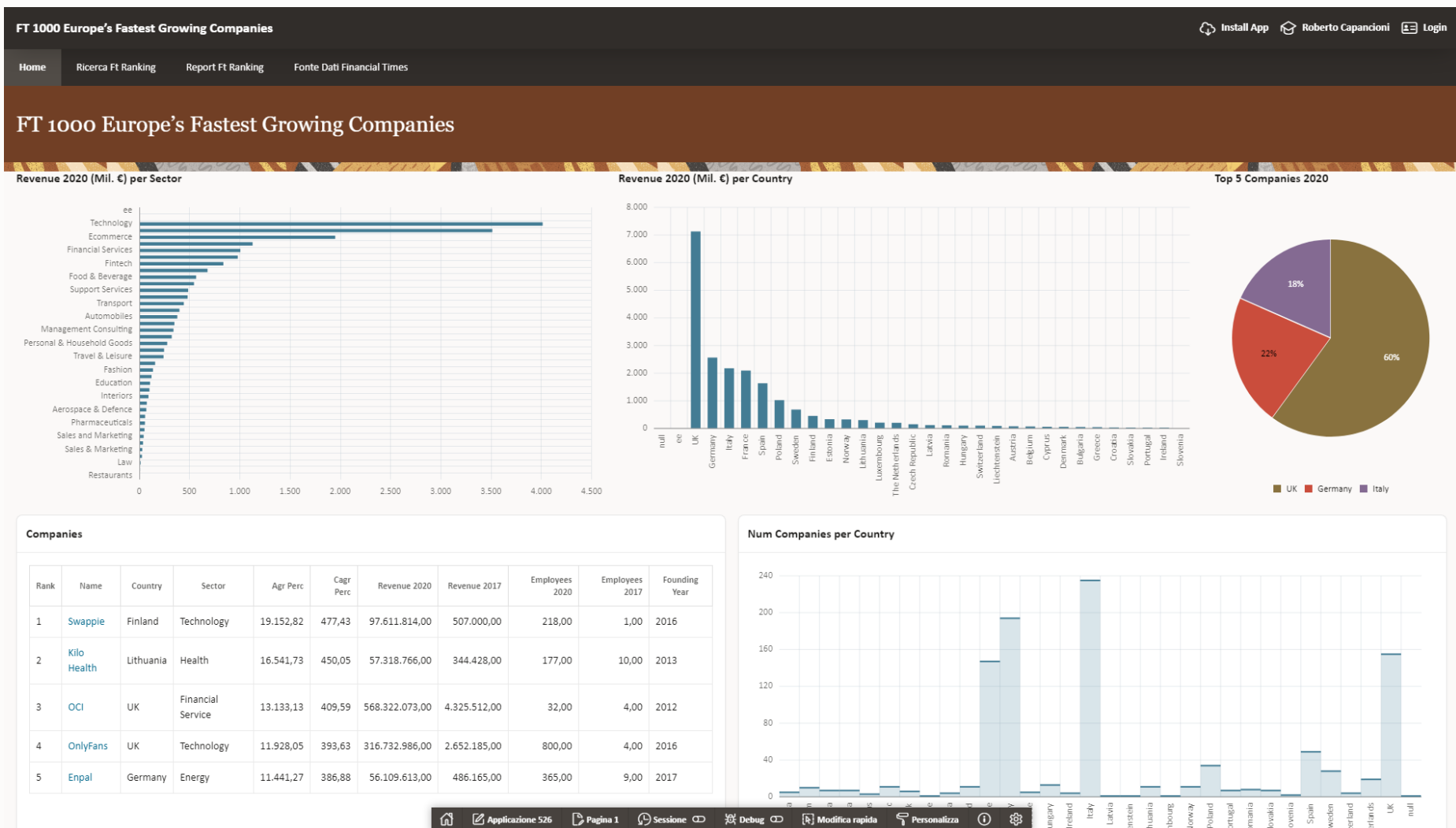
The screenshot shows the APEX SQL Workshop interface. The top navigation bar includes 'APEX', 'App Builder', 'SQL Workshop', 'Team Development', and 'Gallery'. A search bar is on the right. Below the navigation bar, the 'SQL Commands' section shows the query being executed. The query is:   
`select nazione,  
 count(*) as numero,  
 count(distinct NOME) as num_aziende,  
 sum(revenue_2020) as tot_revenue_2020,  
 max(revenue_2020) as max_revenue_2020,  
 round(avg(revenue_2020),2) as media_revenue_2020  
from d06_classifica_ft  
where settore = 'Technology'  
group by nazione  
having sum(revenue_2020) >180000000  
order by tot_revenue_2020 desc  
fetch next 3 rows only;`  
The 'Results' section shows a table with 6 columns: NAZIONE, NUMERO, NUM\_AZIENDE, TOT\_REVENUE\_2020, MAX\_REVENUE\_2020, and MEDIA\_REVENUE\_2020. The table contains 3 rows of data for the UK, Spain, and Poland. The status bar at the bottom indicates '3 rows returned in 0.01 seconds' and provides a 'Download' link.

NAZIONE	NUMERO	NUM_AZIENDE	TOT_REVENUE_2020	MAX_REVENUE_2020	MEDIA_REVENUE_2020
UK	46	46	1303790369	316732986	28343268.89
Spain	10	10	585999654	352879165	58599965.4
Poland	15	15	356726435	191601076	23781762.33

# FT 1000 Europe's Fastest Growing Companies



# FT 1000 Europe's Fastest Growing Companies

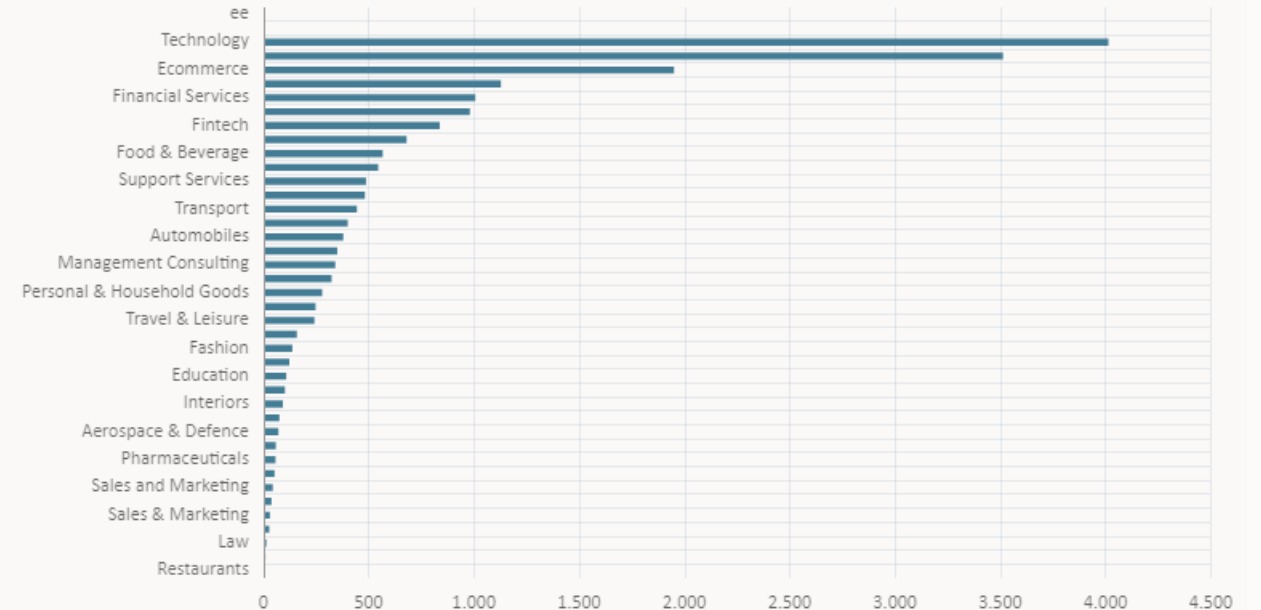




# FT 1000 Europe's Fastest Growing Companies

```
select settore,  
       sum(revenue_2020/1000000)  
         as revenue_2020  
from d06_classifica_ft  
group by settore  
order by revenue_2020 desc
```

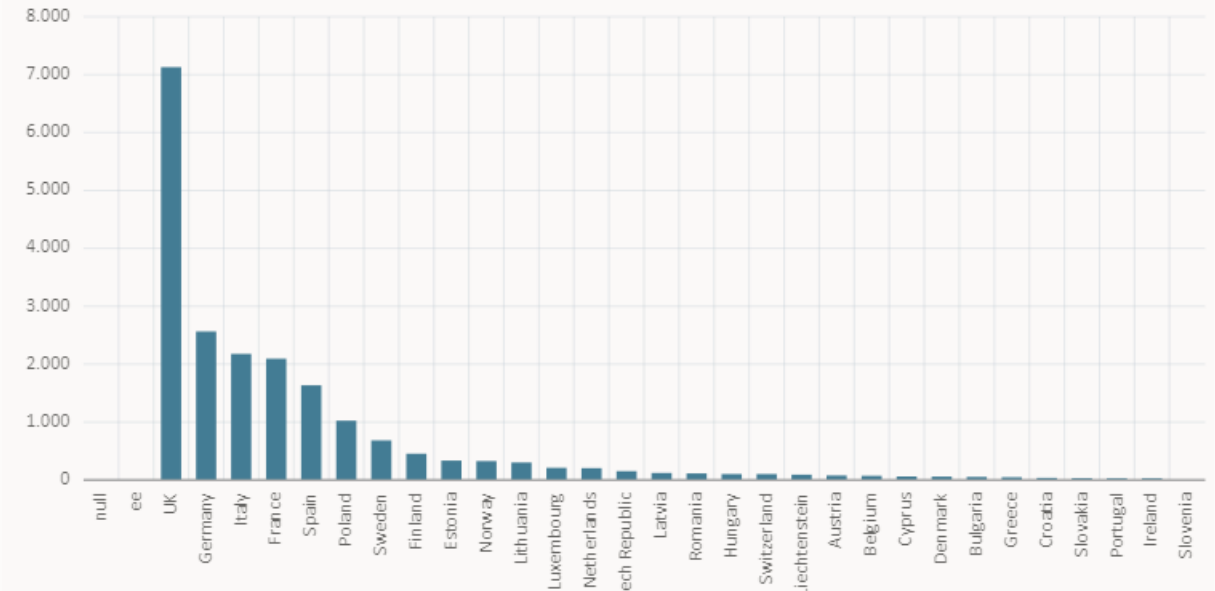
Revenue 2020 (Mil. €) per Sector



# FT 1000 Europe's Fastest Growing Companies

```
select NAZIONE,  
       sum(REVENUE_2020/1000000)  
         as REVENUE_2020  
from d12_classifica_ft  
group by NAZIONE  
order by REVENUE_2020 desc
```

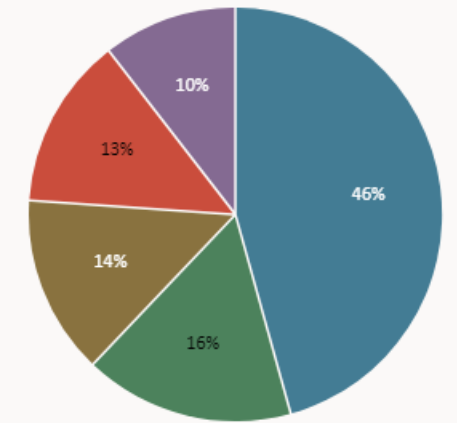
Revenue 2020 (Mil. €) per Country



# FT 1000 Europe's Fastest Growing Companies

```
select NAZIONE,  
       sum(REVENUE_2020/1000000) as REVENUE_2020  
  from d06_classifica_ft  
 group by NAZIONE  
 order by REVENUE_2020 desc nulls last  
  FETCH NEXT 5 ROWS ONLY
```

Top 5 Country 2020



■ UK ■ Germany ■ Italy ■ France ■ Spain

# FT 1000 Europe's Fastest Growing Companies

```
select id,  
       classifica,  
       web,  
       nome,  
       nazione,  
       settore,  
       agr_perc,  
       cagr_perc,  
       revenue_2020,  
       revenue_2017,  
       anno_inizio  
from d06_classifica_ft
```

Companies

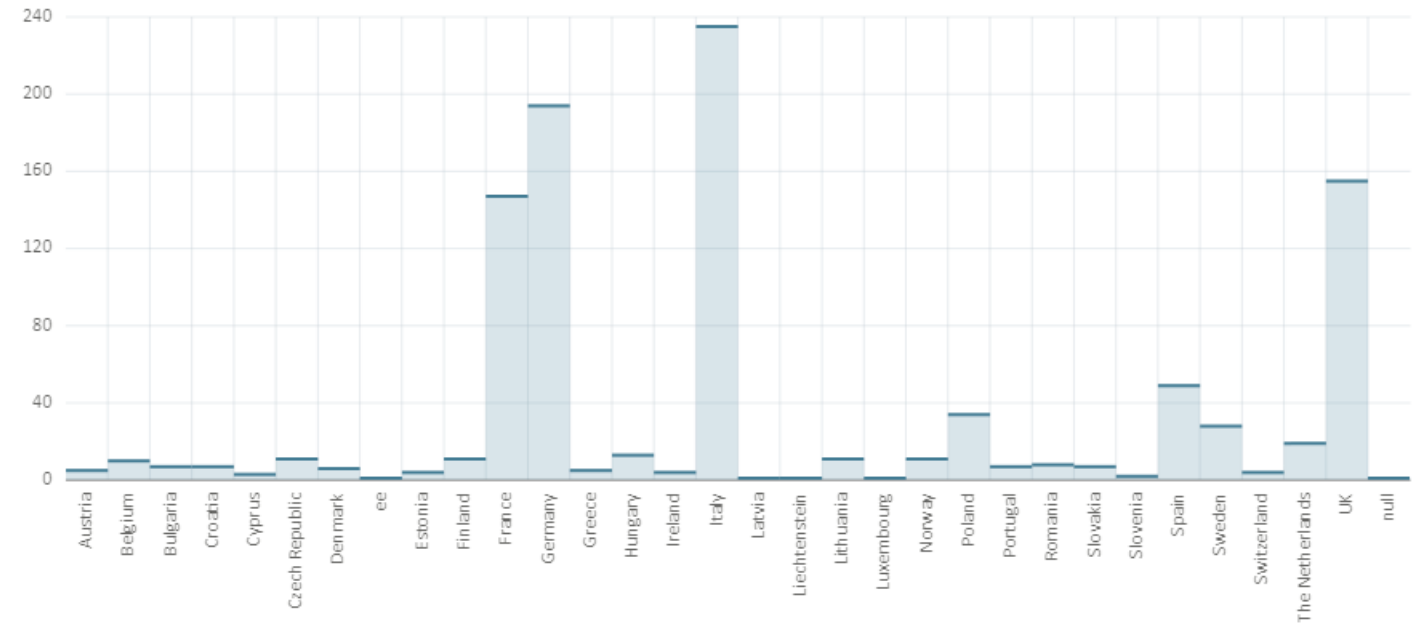
Rank	Name	Country	Sector	Agr Perc	Cagr Perc	Revenue 2020	Revenue 2017	Employees 2020	Employees 2017	Founding Year
1	<a href="#">Swappie</a>	Finland	Technology	19.152,82	477,43	97.611.814,00	507.000,00	218,00	1,00	2016
2	<a href="#">Kilo Health</a>	Lithuania	Health	16.541,73	450,05	57.318.766,00	344.428,00	177,00	10,00	2013
3	<a href="#">OCI</a>	UK	Financial Service	13.133,13	409,59	568.322.073,00	4.325.512,00	32,00	4,00	2012
4	<a href="#">OnlyFans</a>	UK	Technology	11.928,05	393,63	316.732.986,00	2.652.185,00	800,00	4,00	2016
5	<a href="#">Enpal</a>	Germany	Energy	11.441,27	386,88	56.109.613,00	486.165,00	365,00	9,00	2017

1 - 5 Successivo ►

# FT 1000 Europe's Fastest Growing Companies

```
select count(*) as num,  
       NAZIONE  
from d06_classifica_ft  
group by NAZIONE  
order by NAZIONE
```

Num Companies per Country



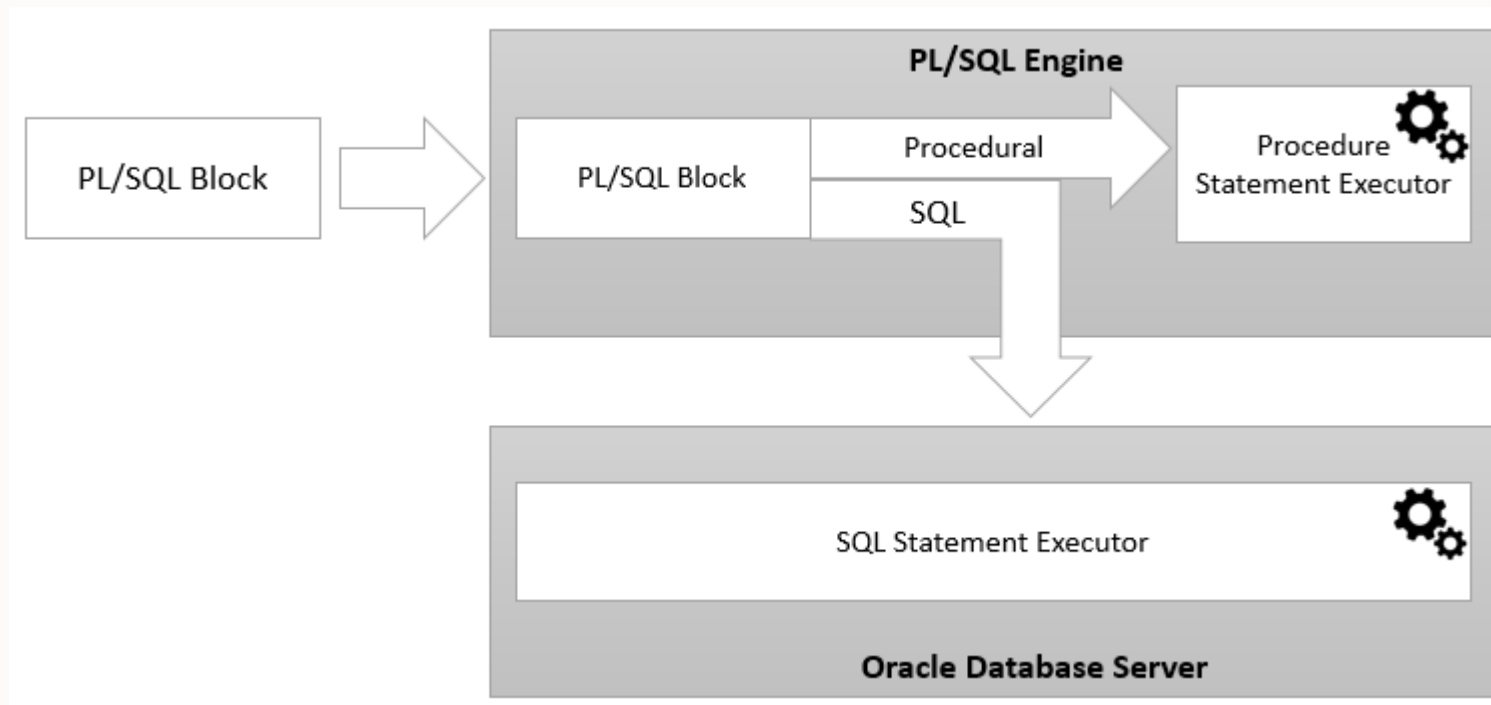
# PL/SQL

---

# PL/SQL

- Aggiunge costrutti procedurali al linguaggio SQL
- E' un linguaggio altamente strutturato
- E' integrato all'interno del database Oracle

**P**rocedural  
**L**anguage extensions to the  
**S**tructured  
**Q**uery  
**L**anguage



## PL/SQL

**BEGIN**

DBMS\_OUTPUT.put\_line ('Hello World!');

**END;**

**/**

**//**



## PL/SQL

**DECLARE**

    l\_message VARCHAR2( 255 ) := 'Hello World!';

**BEGIN**

    DBMS\_OUTPUT.PUT\_LINE( l\_message );

**END;**

**/**

# PL/SQL

**DECLARE**

**V\_RESULT NUMBER;**

**BEGIN**

**V\_RESULT := 1 / 0;**

**EXCEPTION**

**WHEN ZERO\_DIVIDE THEN**

**DBMS\_OUTPUT.PUT\_LINE('Non puoi dividere per zero');**

**WHEN OTHERS THEN**

**DBMS\_OUTPUT.PUT\_LINE( **SQLERRM** );**

**END;**

**/**

Exception	Oracle Error
ACCESS_INTO_NULL	ORA-06530
CASE_NOT_FOUND	ORA-06592
COLLECTION_IS_NULL	ORA-06531
CURSOR_ALREADY_OPEN	ORA-06511
DUP_VAL_ON_INDEX	ORA-00001
INVALID_CURSOR	ORA-01001
INVALID_NUMBER	ORA-01722
LOGIN_DENIED	ORA-01017
NO_DATA_FOUND	ORA-01403
NOT_LOGGED_ON	ORA-01012
PROGRAM_ERROR	ORA-06501
ROWTYPE_MISMATCH	ORA-06504
SELF_IS_NULL	ORA-30625
STORAGE_ERROR	ORA-06500
SUBSCRIPT_BEYOND_COUNT	ORA-06533
SUBSCRIPT_OUTSIDE_LIMIT	ORA-06532
SYS_INVALID_ROWID	ORA-01410
TIMEOUT_ON_RESOURCE	ORA-00051
TOO_MANY_ROWS	ORA-01422
VALUE_ERROR	ORA-06502
ZERO_DIVIDE	ORA-01476

## PL/SQL

**DECLARE**

    l\_data date;

**BEGIN**

**SELECT** sysdate

**INTO** l\_data

**FROM** dual;

    DBMS\_OUTPUT.PUT\_LINE(to\_char(l\_data, 'DD/MM/YYYY HH24:MM:SS'));

**END**;

/

## PL/SQL

**DECLARE**

l\_data date;

**BEGIN**

**SELECT** sysdate

**INTO** l\_data

**FROM** dual;

DBMS\_OUTPUT.PUT\_LINE(to\_char(l\_data, 'DD/MM/YYYY HH24:MM:SS'));

**END**;

/

## PL/SQL

**DECLARE**

l\_venduto NUMBER := 100000;

**BEGIN**

**IF** l\_venduto > 100000 **THEN**

DBMS\_OUTPUT.PUT\_LINE( 'Venduto > 100k' );

**ELSIF** l\_venduto > 50000 **THEN**

DBMS\_OUTPUT.PUT\_LINE( 'Venduto > 50k' );

**ELSE**

DBMS\_OUTPUT.PUT\_LINE( 'Venduto <= 50k' );

**END IF;**

**END;**

/

PL/SQL

**DECLARE**

l\_voto CHAR( 1 );

l\_giudizio VARCHAR2( 20 );

**BEGIN**

l\_voto := 'B';

**CASE** l\_voto

**WHEN 'A' THEN**

l\_giudizio := 'Eccellente' ;

**WHEN 'B' THEN**

l\_giudizio := 'Ottimo' ;

**WHEN 'C' THEN**

l\_giudizio := 'Buono' ;

**WHEN 'D' THEN**

l\_giudizio := 'Sufficiente' ;

**ELSE**

l\_giudizio := 'Insufficiente' ;

**END CASE;**

DBMS\_OUTPUT.PUT\_LINE( l\_giudizio );

**END;**

/

## PL/SQL DECLARE

```
    l_venduto      NUMBER;
    l_commissione  NUMBER;
BEGIN
    l_venduto := 150000;
    CASE
    WHEN l_venduto > 200000 THEN
        l_commissione := 0.2;
    WHEN l_venduto >= 100000 AND l_venduto < 200000 THEN
        l_commissione := 0.15;
    WHEN l_venduto >= 50000 AND l_venduto < 100000 THEN
        l_commissione := 0.1;
    WHEN l_venduto > 30000 THEN
        l_commissione := 0.05;
    ELSE
        l_commissione := 0;
    END CASE;

    DBMS_OUTPUT.PUT_LINE( 'Commissioni:  ' || l_commissione * 100 || '%' );
END;
/
```

```
DECLARE
```

```
BEGIN
```

```
  for c in (select level numero from dual connect by level <=10)
```

```
  loop
```

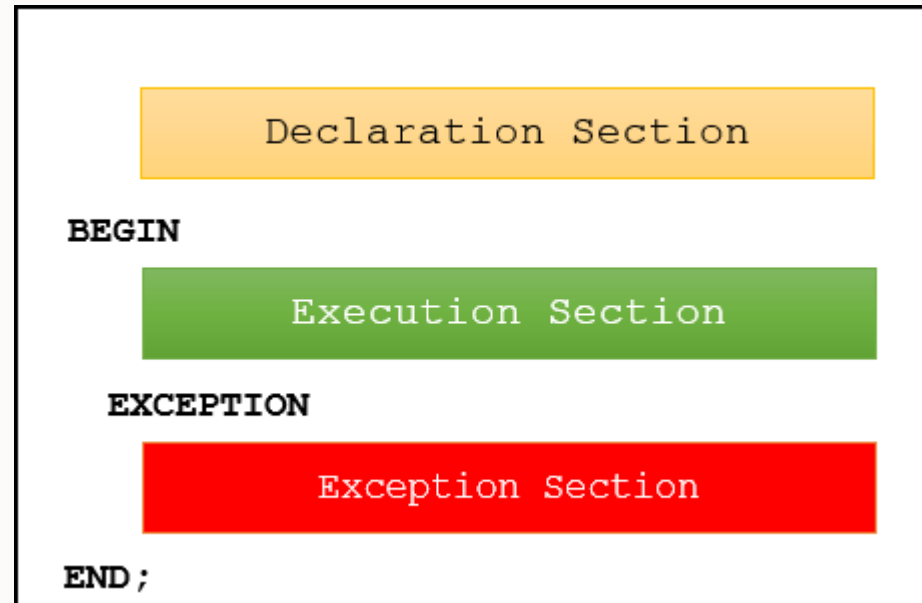
```
    DBMS_OUTPUT.PUT_LINE( 'Numero--> ' || c.numero );
```

```
  end loop;
```

```
END;
```



## Blocco Anonimo



# PL/SQL

## BLOCCO ANONIMO

```
DECLARE
    l_venduto NUMBER := 100000;
BEGIN
    IF l_venduto > 100000 THEN
        DBMS_OUTPUT.PUT_LINE( 'Venduto > 100k ' );
    ELSIF l_venduto > 50000 THEN
        DBMS_OUTPUT.PUT_LINE( 'Venduto > 50k ' );
    ELSE
        DBMS_OUTPUT.PUT_LINE( 'Venduto <= 50k ' );
    END IF;
END;
/
```

## PROCEDURA

```
CREATE OR REPLACE PROCEDURE D06_VENDUTO
(
    p_venduto IN number default 0
)
IS
BEGIN
    IF p_venduto > 100000 THEN
        DBMS_OUTPUT.PUT_LINE( 'Venduto > 100k ' );
    ELSIF p_venduto > 50000 THEN
        DBMS_OUTPUT.PUT_LINE( 'Venduto > 50k ' );
    ELSE
        DBMS_OUTPUT.PUT_LINE( 'Venduto <= 50k ' );
    END IF;
END;
/

BEGIN
    D06_VENDUTO(p_venduto => 100000);
END;
/
```

## BLOCCO ANONIMO

```
DECLARE
    l_venduto NUMBER := 100000;
BEGIN
    IF l_venduto > 100000 THEN
        DBMS_OUTPUT.PUT_LINE( 'Venduto > 100k ' );
    ELSIF l_venduto > 50000 THEN
        DBMS_OUTPUT.PUT_LINE( 'Venduto > 50k ' );
    ELSE
        DBMS_OUTPUT.PUT_LINE( 'Venduto <= 50k ' );
    END IF;
END;
/
```

## FUNZIONE

```
CREATE OR REPLACE FUNCTION D06_GET_VENDUTO
(
    p_venduto IN number default 0
)
RETURN VARCHAR2
IS
    l_return VARCHAR2(100);
BEGIN
    IF p_venduto > 100000 THEN
        l_return := 'Venduto > 100k ';
    ELSIF p_venduto > 50000 THEN
        l_return := 'Venduto > 50k ';
    ELSE
        l_return := 'Venduto <= 50k ';
    END IF;
    RETURN l_return;
END;
/

DECLARE
    l_venduto VARCHAR2(100) := null;
BEGIN
    l_venduto := D06_GET_VENDUTO( p_venduto => 100000 );
    DBMS_OUTPUT.PUT_LINE( l_venduto );
END;
/
```

# PL/SQL

## PROCEDURE E FUNZIONI

```
CREATE OR REPLACE PROCEDURE D06_VENDUTO ...  
...
```

```
CREATE OR REPLACE FUNCTION D06_GET_VENDUTO ...  
...
```

## PACKAGE

```
CREATE OR REPLACE PACKAGE D06_PKG  
IS  
  PROCEDURE VENDUTO (  
    p_venduto IN number default 0  
  );  
  
  FUNCTION GET_VENDUTO (  
    p_venduto IN number default 0  
  )  
  RETURN VARCHAR2;  
  
END D06_PKG;  
/
```

```

CREATE OR REPLACE PACKAGE D06_PKG
IS
PROCEDURE VENDUTO (
    p_venduto IN number default 0
);

FUNCTION GET_VENDUTO (
    p_venduto IN number default 0
)
RETURN VARCHAR2;

END D06_PKG;
/

```

```

CREATE OR REPLACE PACKAGE BODY D06_PKG
IS
    PROCEDURE VENDUTO (
        p_venduto IN number default 0
    )
    IS
    BEGIN
        IF p_venduto > 100000 THEN
            DBMS_OUTPUT.PUT_LINE( 'Venduto > 100k ' );
        ELSIF p_venduto > 50000 THEN
            DBMS_OUTPUT.PUT_LINE( 'Venduto > 50k ' );
        ELSE
            DBMS_OUTPUT.PUT_LINE( 'Venduto <= 50k ' );
        END IF;
    END VENDUTO;

    FUNCTION GET_VENDUTO (
        p_venduto IN number default 0
    )
    RETURN VARCHAR2
    IS
        l_return VARCHAR2(100);
    BEGIN
        IF p_venduto > 100000 THEN
            l_return := 'Venduto > 100k ';
        ELSIF p_venduto > 50000 THEN
            l_return := 'Venduto > 50k ';
        ELSE
            l_return := 'Venduto <= 50k ';
        END IF;
        RETURN l_return;
    END GET_VENDUTO;
END D06_PKG;
/

```

## Richiamo Procedura nel Package

```
BEGIN  
    D06_PKG.VENDUTO(p_venduto => 100000);  
END;  
/
```

## Richiamo Funzione nel Package

```
DECLARE  
    l_venduto VARCHAR2(100) := null;  
BEGIN  
    l_venduto := D06_PKG.GET_VENDUTO(p_venduto => 100000);  
    DBMS_OUTPUT.PUT_LINE( l_venduto );  
END;  
/
```