FACULTY Of INFORMATION, COMMUNICATION
AND TECHNOLOGY

DEPARTMENT COMPUTER SCIENCE
DATA SCIENCE SECTION

WEB TEST 01, S1 2022 memo

Subject Code   :   DBP316D WEB TEST 01 2022, S1

Subject Name : Databases

Examiners   : Mr. S.K Mogapi
Moderator   : Mr F Kgoete
Marks   : 30   Time   : 60 Minutes

Total Pages(Including this one) :   03

INSTRUCTIONS ON HOW TO WRITE THE TEST ON ELECTRONIC CAMPUS (EC):

1. Create a folder on **D:\ Drive** and rename the folder your **student number**.
2. Open a text editor (notepad / notepad ++ is recommended) or MS Word and save the text file in your student number folder..
3. Open the **browser**.
4. Type http://ec.tut.ac.za in the address field of the browser and press enter.
5. Click **Login.**
6. Type in student number for user name and if you are using EC for the first time you must use your student number as your password.
7. Alternatively, you must enter your password. (Tut4life Credentials)
8. Click **Login button**.
9. Click [**Continue**]
10. Select [**Student**]
11. Select [**Tests**]
12. Select [**Webtest 4**]
13. Type or Select **DTP216D** into the first text field.
14. Type or Select **20211** into the second text field.
15. Type or Select B into the third text field (The "**A**" must be a capital letter).
16. Click "**Next**"
17. Click on the "**Write**" button
18. Click on "**[Start]**" and you will be in the test to submit your answers
19. Click on **[Section]** on the test to submit each Questions, and click [Go] to submit your answer- Copy your answer and paste it in the space provided
20. Click **[Test]** to move to the next or previous Questions
21. Under each question click edit to update your answer
22. USE TGH Database ; paste your code into space provided
23. Softcopy of the script and database structure can be downloaded under Down Load File A and B links respectively.

Question 1 (15)

Create a PL/SQL block that will prompt the user to enter a staff number .Your block then has to retrieve and display the surname, telephone number, appointment date, and monthly salary and set up a new password for this staff member. Derive this new password by joining the current password with the last 4 numbers of the staff's telephone number. Make use of the correct padding function to include the stars in the password.

```
Enter value for employee_number: 1
Employee DLAMINI ZUMA
Date employed 1st of January 2014
Monthly Salary    $12,000.00
New Password DZTP#001**4554
PL/SQL procedure successfully completed.
```

```
SQL> /
Enter value for employee_number: 2
Employee MAHLANGU
Date employed 1st of January 2014
Monthly Salary    $10,000.00
New Password MJ#002**4532
PL/SQL procedure successfully completed.
```

```
declare
v_staffnr staff.staffnr%type:=&Employee_number;
v_surname staff.surname%type;
v_telno staff.telno%type;
v_dapp staff.dateappointed%type;        ✓✓✓ ( ½ Per declaration)
v_sal staff.annsal%type;
```

```
v_pass staff.pwd%type;

begin

select surname,telno,dateappointed,annsal/12 ✓,pwd
into v_surname,v_telno,v_dapp,v_sal,v_pass ✓
from staff ✓
where staffnr=v_staffnr; ✓

dbms_output.put_line('Employee '||v_surname); ✓
dbms_output.put_line('Date employed '||to_char(v_dapp,'FMDdth✓ "of" Month YYYY'));
✓
dbms_output.put_line('Monthly Salary '||to_char(v_sal,'$9999,999.00') ✓);✓
dbms_output.put_line('New Password '||v_pass||lpad(substr(v_telno,-4),6,'*') ✓✓);✓

end;
```

Question 2 (15)

Create a PL/SQL block that determines the total number of bookings made by the specific guest. The block must prompt the user to enter a staff number to retrieve and display this guest information as detailed in the output. Any guest with no cell number uses this number "012 5680-000".

```
SQL> /
Enter value for guest_number: 1001
The Guest : MALHERBE(4510074554897) from Germiston who made total number of 4
bookings can be contacted on 071 3562-332

PL/SQL procedure successfully completed.

SQL> /
Enter value for guest_number: 1002
The Guest : NKOSI(7502210056087) from eMALAHLENI who made total number of 7
bookings can be contacted on 012 5680-000

PL/SQL procedure successfully completed.

SQL> /
Enter value for guest_number: 1003
The Guest : MAKHWATSHWA(9110236744589) from Mbombela who made total
number of 2
bookings can be contacted on 084 5678-998

PL/SQL procedure successfully completed.
```

declare

v_surname guest.surname%type;

v_idno guest.idno%type;

v_town guest.htown%type;

v_cellno guest.cellno%type;   ✓✓✓ (½ Per declaration)

v_count number(2);

v_gno guest.gno%type:=&Guest_number;

begin

select surname,idno,htown,nvl(to_char(cellno),'0125680000') ✓✓,count(bookingno) ✓

into v_surname,v_idno,v_town, v_cellno,v_count ✓

from guest g, booking b ✓

where g.gno=b.gno ✓

and g.gno=v_gno ✓

group by surname,idno,htown,cellno; ✓

dbms_output.put_line('The Guest : '||v_surname||'('||v_idno||') from '||v_town||' who

made total number of '||v_count ||' bookings can be contacted on '||substr(v_cellno,1,3)

✓||' '||substr(v_cellno,4,4) ✓||'-'||substr(v_cellno,-3) ✓);✓

end;