1. **Re-do the question 3 of the PL/SQL Assignment 1 by using loop control.**

**Hint: consider using VARRAY. For example**

DECLARE na integer :=0;

BEGIN Select count(\*) into na from gradeReport where grade='B';

if (na > 0) then DBMS\_OUTPUT.PUT\_LINE('there are total ' || na || ' A''s');

else DBMS\_OUTPUT.PUT\_LINE('No student makes an A');

end if;

END;

DECLARE na integer :=0;

BEGIN Select count(\*) into na from gradeReport where grade='C';

if (na > 0) then DBMS\_OUTPUT.PUT\_LINE('there are total ' || na || ' A''s');

else DBMS\_OUTPUT.PUT\_LINE('No student makes an A');

end if;

END;

DECLARE na integer :=0;

BEGIN Select count(\*) into na from gradeReport where grade='D';

if (na > 0) then DBMS\_OUTPUT.PUT\_LINE('there are total ' || na || ' A''s');

else DBMS\_OUTPUT.PUT\_LINE('No student makes an A');

end if;

END;

DECLARE na integer :=0;

BEGIN Select count(\*) into na from gradeReport where grade='F';

if (na > 0) then DBMS\_OUTPUT.PUT\_LINE('there are total ' || na || ' A''s');

else DBMS\_OUTPUT.PUT\_LINE('No student makes an A');

end if;

END;

**2. Type the following anonymous block and execute it.**

**DECLARE**

sm binary\_integer :=0;

i binary\_integer :=0;

BEGIN

loop

i := i + 1;

if i > 10 then

exit;

end if;

sm := sm + i;

end loop;

dbms\_output.put\_line('sum= ' || sm || '.');

END;

sum = 45

**3.Revise the above program by using for loop and while loop respectively, and execute them.**

 Using For loop

DECLARE  
sm binary\_integer :=0;  
i binary\_integer :=0;  
BEGIN  
for i in 1...9 loop // loop starts, i takes values from 1 to 9  
sm := sm + i; // sm is added with i  
end loop; // end of loop  
dbms\_output.put\_line('sum= ' || sm || '.'); // printing the output  
END;

Outpiut

sum = 45

Using While Loop

DECLARE  
i binary\_integer :=0;  
BEGIN  
while i <10 loop //   
sm := sm + i; // sm is added with i

i=i+1; // incrementing the value of i  
end loop; // end of loop  
dbms\_output.put\_line('sum= ' || sm || '.'); // printing the output  
END;

Output

sum = 45