

Sean Graham

SQL Exam 3

#1

```
drop procedure if exists sub2;
```

```
delimiter //
```

```
create procedure sub2(x int, y int)
```

```
Begin
```

```
    Declare s int;
```

```
    set s = x - y;
```

```
    select concat(x, ' - ', y, ' = ', s) as subtraction;
```

```
end//
```

```
delimiter ;
```

#2

```
drop function if exists Sub2;
```

```
delimiter //
```

```
create function Sub2(x int, y int) Returns varchar(50)
```

```
Begin
```

```
    Declare s int;
```

```
    Declare st varchar(50);
```

```
    set s = x - y;
```

```
    set st = concat(x, ' - ', y, ' = ', s);
```

```
    Return(st);
```

```
end//
```

```
delimiter ;
```

#3

```
drop procedure if exists Balance;
```

```

delimiter //

create procedure Balance(AccNum varchar(5))

Begin

    Declare s decimal(10,2);

    set s=0;

    if AccNum in (select IRA_acct from IRAs) then

        select balance into s from IRAs where IRA_acct=AccNum;

        select Concat('Balance of IRA account ', AccNum, ' is $', s ) as IRA_acct_Balance;

    else select Concat('No account has this number') NotFound;

    end if;

end//

delimiter ;

```

#4

```

drop function if exists Balance;

delimiter //

create function Balance(AccNum varchar(5)) returns varchar(50)

Begin

    Declare s Decimal(10,2);

    Declare st varchar(50);

    set s=0;

    if AccNum in (select IRA_acct from IRAs) then

        select Balance into s from IRAs where IRA_acct=AccNum;

        set st = Concat('Balance of IRA account ', AccNum, ' is $', s);

    else set st = Concat('No account has this number');

    end if;

    Return(st);

end//

delimiter ;

```

#5

drop procedure if exists ProdOdds;

delimiter //

create procedure ProdOdds(num int)

Begin

    Declare i, PO int;

    set i=1, PO=1;

    if num <= 1 then

        select concat('No such product exists') as Product\_of\_Odds;

    else

        while i<num do

            set PO=PO\*i;

            set i=i+2;

        end while;

        select concat('The product of all positive odds below ', num, ' is ', PO) as  
Product\_of\_Odds;

    end if;

end//

delimiter ;

#6

drop function if exists ProdOdds;

delimiter //

create Function ProdOdds(num int) returns varchar(60)

Begin

    Declare i, PO int;

    Declare st varchar(60);

    set i = 1, PO = 1;

```

if num <= 1 then
    set st = concat('No such sum exists');
else
    while (i < num) do
        set PO = PO*i;
        set i = i+2;
    end while;
    set st = concat('The product of all positive odds below ', num, ' is ', PO);
end if;
Return(st);
end//
delimiter ;

```

#7

```

create table IRAsDeleteRecords(IDN int, IRA_acct varchar(12), Balance decimal(20, 2),
DeleteTime datetime);

```

```

DROP TRIGGER IF EXISTS IRAsAfterDelete;

```

```

delimiter //

```

```

create trigger IRAsAfterDelete after delete on IRAs for each row

```

```

Begin

```

```

    insert into IRAsDeleteRecords values (old.IDN, old.IRA_Acct, old.Balance, now());

```

```

end//

```

```

delimiter ;

```