

## Faculty of Computing, Engineering and Science

## **Assessment Cover Sheet and Feedback Form 2022-23**

Module Code:	Module Title:	Module Team:				
IS4S761	Principles of Computing	Gaylor Boobyer				
Assessment Title	e and Tasks:	Assessment No. 01				
Port	folio 1 - Element 2	Md Anowar Hossen Faysal ID:30069394				
		E.g. 1 out of 2.				
Date Set:	Submission Date:	Return Date:				
14-Oct-22	02-Dec-22	09-Jan-23				

## IT IS YOUR RESPONSIBILITY TO KEEP RECORDS OF ALL WORK SUBMITTED

## **Marking and Assessment**

This assignment will be marked out of 100%

This assignment contributes to 25% of the total module marks.

**Learning Outcomes to be assessed** (as specified in the validated module descriptor <a href="https://icis.southwales.ac.uk/">https://icis.southwales.ac.uk/</a>):

- 1) To demonstrate a practical understanding of the design of information systems.
- 2) To design and implement a database system that meets a set of requirements and avoids data redundancy.

Provisional mark only: subject to change and / or confirmation by the Assessment Board

## Part A: Record of Submission (to be completed by Student)

## **Extenuating Circumstances**

If there are any exceptional circumstances that may have affected your ability to undertake or submit this assignment, make sure you contact the Advice Centre on your campus prior to your submission deadline.

## Fit to sit policy:

The University operates a fit to sit policy whereby you, in submitting or presenting yourself for an assessment, are declaring that you are fit to sit the assessment. You cannot subsequently claim that your performance in this assessment was affected by extenuating factors.

## Plagiarism and Unfair Practice Declaration:

By submitting this assessment, you declare that it is your own work and that the sources of information and material you have used (including the internet) have been fully identified and properly acknowledged as required<sup>1</sup>. Additionally, the work presented has not been submitted for any other assessment. You also understand that the Faculty reserves the right to investigate allegations of plagiarism or unfair practice which, if proven, could result in a fail in this assessment and may affect your progress.

#### **Details of Submission:**

Note that all work handed in after the submission date and within 5 working days will be capped at 40%<sup>2</sup>. No marks will be awarded if the assessment is submitted after the late submission date unless extenuating circumstances are applied for and accepted (Advice Centre to be consulted).

You are responsible for checking the method of submission. This is an INDIVIDUAL coursework.

You are required to acknowledge that you have read the above statements by writing your student number in the box:

Student Number(s):

IT IS YOUR RESPONSIBILITY TO KEEP A RECORD OF ALL WORK SUBMITTED

<sup>&</sup>lt;sup>1</sup>University Academic Integrity Regulations

<sup>&</sup>lt;sup>2</sup> Information on exclusions to this rule is available from Campus Advice Shops

## Answer: A

```
DROP TABLE VIEWING APPOINTMENT;
DROP TABLE SALE_PROPERTY;
DROP TABLE POTENTIAL_BUYER;
DROP TABLE SELLER;
DROP TABLE STAFF MEMBER;
CREATE TABLE POTENTIAL_BUYER
       (BUYER_NO NUMBER(5) NOT NULL,
        BUYER NAME VARCHAR2(20) NOT NULL,
        BUYER_ADDRESS VARCHAR2(150) NOT NULL,
        BUYER_AREA VARCHAR2(20) NOT NULL,
        MINIMUM_BEDROOM NUMBER(8) NOT NULL,
        MINIMUM BATHROOM NUMBER(4) NOT NULL,
        MINIMUM_RECEPTIONROOM NUMBER(3) NOT NULL,
        GARAGE_REQUIRED NUMBER(3) NOT NULL,
        MAXIMUM_PRICE NUMBER(10,2) NOT NULL,
CONSTRAINT buyer_no_pk PRIMARY KEY (BUYER_NO));
CREATE TABLE SELLER
       (SELLER_ID NUMBER(5) NOT NULL,
        SELLER_NAME VARCHAR2(20) NOT NULL,
        SELLER_ADDRESS VARCHAR2(150) NOT NULL,
        SELLER_PHONE_NUMBER NUMBER(14) NOT NULL,
CONSTRAINT seller_id_pk PRIMARY KEY (SELLER_ID));
CREATE TABLE SALE_PROPERTY
       (PROPERTY_CODE NUMBER(5) NOT NULL,
        PROPERTY_AREA VARCHAR2(20) NOT NULL,
        PROPERTY_ADDRESS VARCHAR2(150) NOT NULL,
        NO_BEDROOM NUMBER(8) NOT NULL,
        NO_BATHROOM NUMBER(4) NOT NULL,
        NO_RECEPTIONROOM NUMBER(3) NOT NULL,
        PROPERTY_TYPE VARCHAR2(20) NOT NULL CHECK( PROPERTY_TYPE IN
('Detached', 'Semi-detached', 'Terrace', 'Link') ),
        PROPERTY PRICE NUMBER (10) NOT NULL,
        NO_GARAGE NUMBER(3) NOT NULL,
        STATE_PROPERTY VARCHAR2 (20) NOT NULL CHECK( STATE_PROPERTY IN
('Unsold','Sold')),
        WHETHER_PROPERTY VARCHAR2(20) NOT NULL CHECK( WHETHER_PROPERTY IN
('freehold','leasehold') ),
        DATE PLACED DATE NOT NULL,
```

```
SELLER ID NUMBER(5) NOT NULL,
CONSTRAINT property_code_pk PRIMARY KEY (PROPERTY_CODE),
CONSTRAINT sellproperty_sellerid_fk FOREIGN KEY (SELLER_ID) REFERENCES
SELLER(SELLER ID)ON DELETE CASCADE);
CREATE TABLE STAFF_MEMBER
       (STAFF MEMBER ID NUMBER(5) NOT NULL,
       STAFF MEMBER NAME VARCHAR2(20) NOT NULL,
        STAFF MEMBER ADDRESS VARCHAR2(150) NOT NULL,
        STAFF_MEMBER_PHONE_NUMBER NUMBER(14) NOT NULL,
        STAFF_MEMBER_BRANCH VARCHAR2(20) NOT NULL,
        STAFF_MEMBER_ROLE VARCHAR2(20) NOT NULL,
CONSTRAINT staffmember_id_pk PRIMARY KEY (STAFF_MEMBER_ID));
CREATE TABLE VIEWING_APPOINTMENT
       (APPOINTMENT ID NUMBER(5) NOT NULL,
        APPOINTMENT DATE TIMESTAMP NOT NULL,
        APPOINTMENT_STATUS VARCHAR2(100) NOT NULL CHECK(
APPOINTMENT_STATUS IN ('Successfull', 'pending') ),
        BUYER_NO NUMBER(5) NOT NULL,
        PROPERTY_CODE NUMBER(5) NOT NULL,
        STAFF_MEMBER_ID NUMBER(5) NOT NULL,
CONSTRAINT Appoinmentid_pk PRIMARY KEY (APPOINTMENT_ID),
CONSTRAINT buyerno_fk FOREIGN KEY (BUYER_NO) REFERENCES
POTENTIAL BUYER(BUYER NO) ON DELETE CASCADE,
CONSTRAINT propertycode_fk FOREIGN KEY (PROPERTY_CODE) REFERENCES
SALE_PROPERTY(PROPERTY_CODE)ON DELETE CASCADE,
CONSTRAINT staffmemberid fk FOREIGN KEY (STAFF MEMBER ID) REFERENCES
STAFF MEMBER(STAFF MEMBER ID) ON DELETE CASCADE);
```

#### **Answer: B**

#### Potential buyer table insert data

```
INSERT INTO potential_buyer VALUES ('1001', 'Muhammad', '39 King George V
Dr W, Cardiff CF14 4EE', 'Cardiff', '3', '1', '1', '1', '800000');
INSERT INTO potential_buyer VALUES ('1002', 'George', '74 St Anthony Rd,
Cardiff CF14 4DJ', 'Cardiff', '5', '2', '1', '1', '1500000');
INSERT INTO potential_buyer VALUES ('1003', 'Arthur', '28 St Georges Rd,
Cardiff CF14 4AQ', 'Cardiff', '3', '2', '1', '1', '10000000');
INSERT INTO potential_buyer VALUES ('1004', 'Jacob', '24 Silver Birch Cl,
Cardiff CF14 1EL', 'Cardiff', '6', '3', '1', '2', '1800000');
INSERT INTO potential_buyer VALUES ('1005', 'Harry', '78 Heol Gabriel,
Cardiff CF14 1JW', 'Cardiff', '4', '2', '1', '1', '1500000');
INSERT INTO potential_buyer VALUES ('1006', 'Jesse', '11 Court Rd, Cardiff
CF14 1HN', 'Cardiff', '3', '1', '1', '2', '1500000');
INSERT INTO potential_buyer VALUES ('1007', 'Emily ', '92 Wood Rd,
Treforest, Pontypridd', 'Pontypridd', '2', '1', '1', '1', '800000');
INSERT INTO potential_buyer VALUES ('1008', '0liver', '8 New Park Terrace,
Treforest, Pontypridd CF37 1TH', 'Pontypridd', '4', '2', '1', '1',
INSERT INTO potential_buyer VALUES ('1009', 'Bartholomew', '9 King St,
Treforest, Pontypridd CF37 1RP', 'Pontypridd', '4', '2', '1', '1',
INSERT INTO potential_buyer VALUES ('1010', 'Griffith', '25 S Market St,
Newport NP20 2AX', 'Newport', '3', '2', '2', '1', '1100000');
INSERT INTO potential_buyer VALUES ('1011', 'Jones', '9 Bolt St, Newport
NP20 2AN', 'Newport', '5', '2', '1', '1', '1500000');
INSERT INTO potential_buyer VALUES ('1012', 'Tobiah', '135A Commercial Rd,
Newport NP20 2PH', 'Newport', '6', '3', '2', '2', '1700000');
INSERT INTO potential_buyer VALUES ('1013', 'Wilbert', '17 Carlton
Terrace, Swansea SA1 6AB', 'Swansea', '3', '2', '2', '2', '1200000');
```

#### Seller table insert data

```
INSERT INTO seller VALUES ('101', 'Adam', '8 Ethel St, Cardiff CF5 1EJ',
'07901777227');
INSERT INTO seller VALUES ('102', 'Alexander', '10 Daisy St, Cardiff CF5
1ES', '07714642772');
INSERT INTO seller VALUES ('103', 'Ronnie', '18 Daisy St, Cardiff CF5
1EP', '07029484764');
INSERT INTO seller VALUES ('104', 'Tommy', '32 Romilly Rd, Cardiff CF5
1FN', '07913785949');
INSERT INTO seller VALUES ('105', 'Acacius', '2 Egham St, Cardiff CF5
1FQ', '07785206064');
INSERT INTO seller VALUES ('106', 'Arlo', '21 Preswylfa St, Cardiff CF5
1FS', '07746857155');
INSERT INTO seller VALUES ('107', 'Grey', '26 Lysaght Ave, Newport NP19
0XB', '07834187098');
INSERT INTO seller VALUES ('108', 'Archie', '16 Lysaght Way, Newport NP19
4AD', '07730259380');
```

```
INSERT INTO seller VALUES ('109', 'Easton', '736 Corporation Rd, Newport
NP19 4AD', '07015468023');
INSERT INTO seller VALUES ('110', 'Hunter', '17 Clarke Rd, Newport NP19
0XB', '07902911961');
INSERT INTO seller VALUES ('111', 'Finn', '12 Lysaght Way, Newport NP19
4AD', '07951825351');
INSERT INTO seller VALUES ('112', 'Luca', '8 MacKintosh Rd, Pontypridd
CF37 4AE', '07079489831');
INSERT INTO seller VALUES ('113', 'Roman', '26 MacKintosh Rd, Pontypridd
CF37 4AG', '07734168728');
INSERT INTO seller VALUES ('114', 'Asher', '6 Tygwyn Rd, Church Village,
Pontypridd CF38 1DY', '07900026081');
INSERT INTO seller VALUES ('115', 'Hugo', '22 Wingfield Cl, Pontypridd
CF37 4AB', '07066108996');
INSERT INTO seller VALUES ('116', 'Mateo', '9 Page St, Swansea SA1 4EZ',
'07048185629');
INSERT INTO seller VALUES ('117', 'Otto', '26 Page St, Swansea SA1 4EY',
'0788278732');
INSERT INTO seller VALUES ('118', 'James', '12 Nicholl St, Swansea SA1
4HE', '07989974498');
INSERT INTO seller VALUES ('119', 'Aarav', '28 Page St, Swansea SA1 4EY',
'07861384206');
INSERT INTO seller VALUES ('120', 'Jasper', '70 Mansel St, Swansea SA1
5TN', '07003183470');
INSERT INTO seller VALUES ('121', 'Micah', '7 Carlton Terrace, Swansea SA1
6AB', '07003183471');
```

## Sale property table insert data:

```
INSERT INTO sale_property VALUES ('5001', 'Cardiff', '8 Ethel St, Cardiff
CF5 1EJ', '4', '2', '2', 'Detached', '10000000', '1', 'Unsold', 'freehold',
'01-Jan-22', '101');
INSERT INTO sale_property VALUES ('5002', 'Cardiff', '10 Daisy St, Cardiff
CF5 1ES', '3', '1', '1', 'Link', '900000', '2', 'Sold', 'leasehold', '02-
Jan-22', '102');
INSERT INTO sale_property VALUES ('5003', 'Cardiff', '18 Daisy St, Cardiff
CF5 1EP', '2', '1', '1', 'Detached', '800000', '1', 'Unsold', 'leasehold',
'05-Jan-22', '103');
INSERT INTO sale_property VALUES ('5004', 'Cardiff', '32 Romilly Rd,
Cardiff CF5 1FN', '5', '2', '2', 'Detached', '1500000', '2', 'Unsold',
'freehold', '06-Jan-22', '104');
INSERT INTO sale property VALUES ('5005', 'Cardiff', '2 Egham St, Cardiff
CF5 1FQ', '3', '1', '1', 'Link', '900000', '1', 'Sold', 'leasehold', '07-
Jan-22', '105');
INSERT INTO sale property VALUES ('5006', 'Cardiff', '21 Preswylfa St,
Cardiff CF5 1FS', '2', '1', '1', 'Semi-detached', '800000', '1', 'Sold',
'freehold', '08-Jan-22', '106');
INSERT INTO sale_property VALUES ('5007', 'Newport', '26 Lysaght Ave,
Newport NP19 0XB', '4', '2', '1', 'Terrace', '1300000', '1', 'Sold',
'leasehold', '15-Jan-22', '107');
```

```
INSERT INTO sale_property VALUES ('5008', 'Newport', '16 Lysaght Way,
Newport NP19 4AD', '5', '2', '2', 'Semi-detached', '1600000', '2',
'Unsold', 'freehold', '01-Feb-22', '108');
INSERT INTO sale_property VALUES ('5009', 'Newport', '736 Corporation Rd,
Newport NP19 4AD', '6', '3', '3', 'Link', '1700000', '2', 'Sold',
'freehold', '05-Feb-22', '109');
INSERT INTO sale_property VALUES ('5010', 'Newport', '17 Clarke Rd,
Newport NP19 0XB', '4', '2', '2', 'Semi-detached', '1300000', '1',
'Unsold', 'leasehold', '07-Feb-22', '110');
INSERT INTO sale_property VALUES ('5011', 'Newport', '12 Lysaght Way,
Newport NP19 4AD', '4', '2', '1', 'Terrace', '1350000', '1', 'Unsold',
'freehold', '08-Feb-22', '111');
INSERT INTO sale_property VALUES ('5012', 'Pontypridd', '8 MacKintosh Rd,
Pontypridd CF37 4AE', '3', '1', '1', 'Terrace', '1300000', '1', 'Sold',
'leasehold', '17-Feb-22', '112');
INSERT INTO sale_property VALUES ('5013', 'Pontypridd', '26 MacKintosh Rd,
Pontypridd CF37 4AG', '2', '1', '1', 'Semi-detached', '850000', '1',
'Sold', 'freehold', '01-Mar-22', '113');
INSERT INTO sale_property VALUES ('5014', 'Pontypridd', '6 Tygwyn Rd,
Church Village, Pontypridd CF38 1DY', '5', '3', '2', 'Link', '750000',
'2', 'Unsold', 'leasehold', '05-Mar-22', '114');
INSERT INTO sale_property VALUES ('5015', 'Pontypridd', '22 Wingfield Cl,
Pontypridd CF37 4AB', '3', '1', '1', 'Detached', '900000', '1', 'Sold',
'freehold', '10-Mar-22', '115');
INSERT INTO sale property VALUES ('5016', 'Swansea', '9 Page St, Swansea
SA1 4EZ', '3', '1', '1', 'Terrace', '950000', '1', 'Unsold', 'freehold',
'22-Mar-22', '116');
INSERT INTO sale property VALUES ('5017', 'Swansea', '26 Page St, Swansea
SA1 4EY', '4', '2', '2', 'Semi-detached', '1150000', '2', 'Sold',
'leasehold', '24-Mar-22', '117');
INSERT INTO sale property VALUES ('5019', 'Swansea', '28 Page St, Swansea
SA1 4EY', '3', '2', '1', 'Detached', '850000', '1', 'Sold', 'freehold',
'25-Mar-22', '119');
INSERT INTO sale property VALUES ('5020', 'Swansea', '70 Mansel St,
Swansea SA1 5TN', '4', '2', '2', 'Link', '950000', '1', 'Unsold',
'leasehold', '01-Dec-22', '120');
INSERT INTO sale property VALUES ('5021', 'Swansea', '7 Carlton Terrace,
Swansea SA1 6AB', '3', '1', '1', 'Semi-detached', '750000', '2', 'Sold',
'freehold', '02-Dec-22', '121');
```

#### Staff member table insert data

```
INSERT INTO staff_member VALUES ('3001', 'Patrick Vieira', '35 Jenkins St, Newport NP19 0GQ', '07823948561', 'Cardiff', 'Manager ');
INSERT INTO staff_member VALUES ('3002', 'Sophie', '16 Henson St, Newport NP19 0HN', '07859227583', 'Cardiff', 'senior Staff ');
INSERT INTO staff_member VALUES ('3003', 'Violet', '14 Liscombe St, Newport NP19 0HQ', '07948264679', 'Swansea ', 'Junior staff');
INSERT INTO staff_member VALUES ('3004', 'Graham Potter', '57 Liscombe St, Newport NP19 0HQ', '07071614190', 'Newport', 'Manager ');
```

```
INSERT INTO staff_member VALUES ('3005', 'Willow', '3 Hurford St,
Maesycoed, Pontypridd CF37 1EW', '07741155127', 'Newport', 'senior Staff
');
INSERT INTO staff_member VALUES ('3006', 'Antonio Conte', '32 Hurford St,
Maesycoed, Pontypridd CF37 1EW', '07040188661', 'Newport', 'Manager ');
INSERT INTO staff_member VALUES ('3007', 'Zoe', '29 Barry Rd, Pontypridd
CF37 1HY', '07715800226', 'Pontypridd ', 'senior Staff ');
INSERT INTO staff_member VALUES ('3008', 'Phoebe', '138 Western Ave N,
Cardiff CF14 2SD', '07824657508', 'Swansea ', 'Junior staff');
INSERT INTO staff_member VALUES ('3009', 'Marco Silva', '78 Ton-Yr-Ywen
Ave, Cardiff CF14 4PB', '07957838317', 'Pontypridd ', 'Manager ');
INSERT INTO staff_member VALUES ('3010', 'Emma', '157 Western St, Swansea
SA1 3JZ', '07057142929', 'Pontypridd ', 'Junior staff');
```

## View appointment table insert data

```
INSERT INTO viewing_appointment VALUES ('7001', '01-Jan-22 10.14.23.111001
AM', 'Successfull', '1009', '5004', '3001');
INSERT INTO viewing_appointment VALUES ('7002', '02-Jan-22 11.34.13.112211
AM', 'pending', '1010', '5005', '3002');
INSERT INTO viewing appointment VALUES ('7003', '03-Jan-22 10.24.03.111111
AM', 'Successfull', '1005', '5006', '3003');
INSERT INTO viewing_appointment VALUES ('7004', '04-Jan-22 08.14.22.111133
AM', 'Successfull', '1006', '5007', '3004');
INSERT INTO viewing appointment VALUES ('7005', '07-Jan-22 10.19.23.111111
AM', 'pending', '1007', '5008', '3005');
INSERT INTO viewing_appointment VALUES ('7006', '11-Jan-22 10.54.25.111111
AM', 'Successfull', '1008', '5009', '3006');
INSERT INTO viewing_appointment VALUES ('7007', '12-Jan-22 11.24.23.111111
AM', 'Successfull', '1006', '5010', '3002');
INSERT INTO viewing appointment VALUES ('7008', '11-Feb-22 01.04.25.111111
AM', 'pending', '1007', '5011', '3003');
INSERT INTO viewing_appointment VALUES ('7009', '12-Feb-22 01.54.33.111111
AM', 'Successfull', '1008', '5012', '3004');
INSERT INTO viewing_appointment VALUES ('7010', '13-Feb-22 08.34.23.111111
AM', 'Successfull', '1009', '5013', '3005');
INSERT INTO viewing_appointment VALUES ('7011', '17-Mar-22 11.24.13.111111
AM', 'pending', '1010', '5014', '3006');
INSERT INTO viewing_appointment VALUES ('7012', '11-Mar-22 01.14.03.111111
AM', 'pending', '1011', '5015', '3005');
INSERT INTO viewing_appointment VALUES ('7013', '19-Mar-22 09.04.23.112211
AM', 'Successfull', '1012', '5016', '3006');
INSERT INTO viewing_appointment VALUES ('7014', '21-Apr-22 02.12.11.111111
AM', 'pending', '1010', '5017', '3007');
```

## Answer: c

# -- QUSTION:1 SELECT \* FROM SALE\_PROPERTY WHERE PROPERTY\_AREA='Swansea';

PROPERTY_CODE	PROPERTY_AREA	PROPERTY_ADDRESS	NO_BEDROOM	NO_BATHROOM	NO_RECEPTIONROOM	PROPERTY_TYPE	PROPERTY_PRICE	NO_GARAGE	STATE_PROPERTY	WHETHER_PROPERTY	DATE_PLACED	SELLER_ID
5016	Swansea	9 Page St, Swansea SA1 4EZ	3	1	1	Terrace	950000	1	Unsold	freehold	22-MAR-22	116
5017	Swansea	26 Page St, Swansea SA1 4EY	4	2	2	Semi-detached	1150000	2	Sold	leasehold	24-MAR-22	117
5019	Swansea	28 Page St, Swansea SA1 4EY	3	2	1	Detached	850000	1	Sold	freehold	25-MAR-22	119
5020	Swansea	70 Mansel St, Swansea SA1 5TN	4	2	2	Link	950000	1	Unsold	leasehold	01-DEC-22	120
5021	Swansea	7 Carlton Terrace, Swansea SA1 6AB	3	1	1	Semi-detached	750000	2	Sold	freehold	02-DEC-22	121

-- QUESTION:2
SELECT \* FROM SALE\_PROPERTY WHERE PROPERTY\_TYPE='Semi-detached' AND
STATE PROPERTY= 'Sold';

PROPERTY_CODE	PROPERTY_AREA	PROPERTY_ADDRESS	NO_BEDROOM	NO_BATHROOM	NO_RECEPTIONROOM	PROPERTY_TYPE	PROPERTY_PRICE	NO_GARAGE	STATE_PROPERTY	WHETHER_PROPERTY	DATE_PLACED	SELLER_ID
5006	Cardiff	21 Preswylfa St, Cardiff CF5 1FS	2	1	1	Semi-detached	800000	1	Sold	freehold	08-JAN-22	106
5013	Pontypridd	26 MacKintosh Rd, Pontypridd CF37 4AG	2	1	1	Semi-detached	850000	1	Sold	freehold	01-MAR-22	113
5017	Swansea	26 Page St, Swansea SA1 4EY	4	2	2	Semi-detached	1150000	2	Sold	leasehold	24-MAR-22	117
5021	Swansea	7 Carlton Terrace, Swansea SA1 6AB	3	1	1	Semi-detached	750000	2	Sold	freehold	02-DEC-22	121

```
SELECT
    PROPERTY_TYPE AS Type,
    COUNT (STATE_PROPERTY) AS NumberSold
FROM SALE_PROPERTY
WHERE
    STATE_PROPERTY = 'Sold'
GROUP BY
PROPERTY_TYPE;
```

TYPE	NUMBERSOLD
Link	3
Terrace	2
Semi-detached	4
Detached	2

```
-- QUESTION:4

SELECT * FROM SALE_PROPERTY

WHERE STATE_PROPERTY = 'Unsold'

AND PROPERTY_PRICE = (( SELECT MIN(PROPERTY_PRICE) FROM SALE_PROPERTY

WHERE STATE_PROPERTY = 'Unsold'))

OR PROPERTY_PRICE = ((SELECT MAX(PROPERTY_PRICE) FROM SALE_PROPERTY

WHERE STATE_PROPERTY = 'Unsold'));
```

PROPERTY_CODE	PROPERTY_AREA	PROPERTY_ADDRESS	NO_BEDROOM	NO_BATHROOM	NO_RECEPTIONROOM	PROPERTY_TYPE	PROPERTY_PRICE	NO_GARAGE	STATE_PROPERTY	WHETHER_PROPERTY	DATE_PLACED	SELLER_ID
5008	Newport	16 Lysaght Way, Newport NP19 4AD	5	2	2	Semi-detached	1600000	2	Unsold	freehold	01-FE8-22	108
5014	Pontypridd	6 Tygwyn Rd, Church Village, Pontypridd CF38 1DY	5	3	2	Link	750000	2	Unsold	leasehold	05-MAR-22	114

-- QUESTION:5

SELECT \*

FROM SALE\_PROPERTY

WHERE NO\_BEDROOM >= 3 AND NO\_BATHROOM >= 1 AND NO\_GARAGE= 1;

PROPERTY_CODE	PROPERTY_AREA	PROPERTY_ADDRESS	NO_BEDROOM	NO_BATHROOM	NO_RECEPTIONROOM	PROPERTY_TYPE	PROPERTY_PRICE	NO_GARAGE	STATE_PROPERTY	WHETHER_PROPERTY	DATE_PLACED	SELLER_ID
5001	Cardiff	8 Ethel St, Cardiff CF5 1EJ	4	2	2	Detached	1000000	1	Unsold	freehold	01-JAN-22	101
5005	Cardiff	2 Egham St, Cardiff CF5 1FQ	3	1	1	Link	900000	1	Sold	leasehold	07-JAN-22	105
5007	Newport	26 Lysaght Ave, Newport NP19 0XB	4	2	1	Terrace	1300000	1	Sold	leasehold	15-JAN-22	107
5010	Newport	17 Clarke Rd, Newport NP19 0XB	4	2	2	Semi-detached	1300000	1	Unsold	leasehold	07-FEB-22	110
5011	Newport	12 Lysaght Way, Newport NP19 4AD	4	2	1	Terrace	1350000	1	Unsold	freehold	08-FEB-22	111
5012	Pontypridd	8 MacKintosh Rd, Pontypridd CF37 4AE	3	1	1	Terrace	1300000	1	Sold	leasehold	17-FEB-22	112
5015	Pontypridd	22 Wingfield Cl, Pontypridd CF37 4AB	3	1	1	Detached	900000	1	Sold	freehold	10-MAR-22	115
5016	Swansea	9 Page St, Swansea SA1 4EZ	3	1	1	Terrace	950000	1	Unsold	freehold	22-MAR-22	116

-- QUESTION:6

SELECT \* FROM SALE\_PROPERTY

WHERE DATE\_PLACED BETWEEN '01-JAN-22' AND '28-FEB-22';

PROPERTY_CODE	PROPERTY_AREA	PROPERTY_ADDRESS	NO_BEDROOM	NO_BATHROOM	NO_RECEPTIONROOM	PROPERTY_TYPE	PROPERTY_PRICE	NO_GARAGE	STATE_PROPERTY	WHETHER_PROPERTY	DATE_PLACED	SELLER_ID
5001	Cardiff	8 Ethel St, Cardiff CF5 1EJ	4	2	2	Detached	1000000	1	Unsold	freehold	01-JAN-22	101
5002	Cardiff	10 Daisy St, Cardiff CF5 1ES	3	1	1	Link	900000	2	Sold	leasehold	02-JAN-22	102
5003	Cardiff	18 Daisy St, Cardiff CF5 1EP	2	1	1	Detached	800000	1	Unsold	leasehold	05-JAN-22	103
5004	Cardiff	32 Romilly Rd, Cardiff CF5 1FN	5	2	2	Detached	1500000	2	Unsold	freehold	06-JAN-22	104
5005	Cardiff	2 Egham St, Cardiff CF5 1FQ	3	1	1	Link	900000	1	Sold	leasehold	07-JAN-22	105
5006	Cardiff	21 Preswylfa St, Cardiff CF5 1FS	2	1	1	Semi-detached	800000	1	Sold	freehold	08-JAN-22	106
5007	Newport	26 Lysaght Ave, Newport NP19 0XB	4	2	1	Terrace	1300000	1	Sold	leasehold	15-JAN-22	107
5008	Newport	16 Lysaght Way, Newport NP19 4AD	5	2	2	Semi-detached	1600000	2	Unsold	freehold	01-FEB-22	108
5009	Newport	736 Corporation Rd, Newport NP19 4AD	6	3	3	Link	1700000	2	Sold	freehold	05-FEB-22	109
5010	Newport	17 Clarke Rd, Newport NP19 0XB	4	2	2	Semi-detached	1300000	1	Unsold	leasehold	07-FEB-22	110
5011	Newport	12 Lysaght Way, Newport NP19 4AD	4	2	1	Terrace	1350000	1	Unsold	freehold	08-FEB-22	111
5012	Pontypridd	8 MacKintosh Rd, Pontypridd CF37 4AE	3	1	1	Terrace	1300000	1	Sold	leasehold	17-FEB-22	112

```
SELECT * FROM SALE_PROPERTY WHERE

STATE_PROPERTY = 'Unsold'

AND PROPERTY_PRICE IN ( SELECT MIN(PROPERTY_PRICE) FROM SALE_PROPERTY

WHERE STATE_PROPERTY = 'Unsold' GROUP BY PROPERTY_TYPE )

OR PROPERTY_PRICE IN ( SELECT MAX(PROPERTY_PRICE) FROM SALE_PROPERTY WHERE

STATE_PROPERTY = 'Unsold' GROUP BY PROPERTY_TYPE )

order by PROPERTY_TYPE;
```

PROPERTY_CODE	PROPERTY_AREA	PROPERTY_ADDRESS	NO_BEDROOM	NO_BATHROOM	NO_RECEPTIONROOM	PROPERTY_TYPE	PROPERTY_PRICE	NO_GARAGE	STATE_PROPERTY	WHETHER_PROPERTY	DATE_PLACED	SELLER_ID
5004	Cardiff	32 Romilly Rd, Cardiff CF5 1FN	5	2	2	Detached	1500000	2	Unsold	freehold	06-JAN-22	104
5003	Cardiff	18 Daisy St, Cardiff CF5 1EP	2	1	1	Detached	800000	1	Unsold	leasehold	05-JAN-22	103
5014	Pontypridd	6 Tygwyn Rd, Church Village, Pontypridd CF38 1DY	5	3	2	Link	750000	2	Unsold	leasehold	05-MAR-22	114
5020	Swansea	70 Mansel St, Swansea SA1 5TN	4	2	2	Link	950000	1	Unsold	leasehold	01-DEC-22	120
5008	Newport	16 Lysaght Way, Newport NP19 4AD	5	2	2	Semi-detached	1600000	2	Unsold	freehold	01-FEB-22	108
5010	Newport	17 Clarke Rd, Newport NP19 0XB	4	2	2	Semi-detached	1300000	1	Unsold	leasehold	07-FEB-22	110
5016	Swansea	9 Page St, Swansea SA1 4EZ	3	1	1	Terrace	950000	1	Unsold	freehold	22-MAR-22	116
5011	Newport	12 Lysaght Way, Newport NP19 4AD	4	2	1	Terrace	1350000	1	Unsold	freehold	08-FEB-22	111

#### -- QUESTION 8

SELECT SM.STAFF\_MEMBER\_NAME, SM.STAFF\_MEMBER\_PHONE\_NUMBER,
SP.PROPERTY\_CODE, SP.PROPERTY\_AREA, SP.PROPERTY\_ADDRESS, SP.NO\_BEDROOM,
SP.NO\_BATHROOM, SP.NO\_RECEPTIONROOM, SP.PROPERTY\_TYPE, SP.PROPERTY\_PRICE,
SP.NO\_GARAGE, SP.STATE\_PROPERTY,
SP.WHETHER\_PROPERTY
FROM VIEWING\_APPOINTMENT V , STAFF\_MEMBER SM, SALE\_PROPERTY SP
WHERE SM.STAFF\_MEMBER\_ID = V.STAFF\_MEMBER\_ID AND
V.PROPERTY\_CODE=SP.PROPERTY\_CODE AND
SM.STAFF\_MEMBER\_NAME = 'Sophie';



```
SELECT BUYER_NAME, SELLER_NAME, PROPERTY_ADDRESS, STAFF_MEMBER_NAME,
APPOINTMENT_DATE         FROM VIEWING_APPOINTMENT , POTENTIAL_BUYER, SELLER,
SALE_PROPERTY , STAFF_MEMBER

WHERE         POTENTIAL_BUYER.BUYER_NO (+) = VIEWING_APPOINTMENT.BUYER_NO AND
               SELLER.SELLER_ID (+) = SALE_PROPERTY.SELLER_ID AND
               SALE_PROPERTY_CODE (+) =
VIEWING_APPOINTMENT.PROPERTY_CODE AND
               STAFF_MEMBER.STAFF_MEMBER_ID (+) =
VIEWING_APPOINTMENT.STAFF_MEMBER_ID;
```

BUYER_NAME	SELLER_NAME	PROPERTY_ADDRESS	STAFF_MEMBER_NAME	APPOINTMENT_DATE
Bartholomew	Tommy	32 Romilly Rd, Cardiff CF5 1FN	Patrick Vieira	01-JAN-22 10.14.23.111001 AM
Griffith	Acacius	2 Egham St, Cardiff CF5 1FQ	Sophie	02-JAN-22 11.34.13.112211 AM
Harry	Arlo	21 Preswylfa St, Cardiff CF5 1FS	Violet	03-JAN-22 10.24.03.111111 AM
Jesse	Grey	26 Lysaght Ave, Newport NP19 0XB	Graham Potter	04-JAN-22 08.14.22.111133 AM
Emily	Archie	16 Lysaght Way, Newport NP19 4AD	Willow	07-JAN-22 10.19.23.111111 AM
Oliver	Easton	736 Corporation Rd, Newport NP19 4AD	Antonio Conte	11-JAN-22 10.54.25.111111 AM
Jesse	Hunter	17 Clarke Rd, Newport NP19 0XB	Sophie	12-JAN-22 11.24.23.111111 AM
Emily	Finn	12 Lysaght Way, Newport NP19 4AD	Violet	11-FEB-22 01.04.25.111111 AM
Oliver	Luca	8 MacKintosh Rd, Pontypridd CF37 4AE	Graham Potter	12-FEB-22 01.54.33.111111 AM
Bartholomew	Roman	26 MacKintosh Rd, Pontypridd CF37 4AG	Willow	13-FEB-22 08.34.23.111111 AM
Griffith	Asher	6 Tygwyn Rd, Church Village, Pontypridd CF38 1DY	Antonio Conte	17-MAR-22 11.24.13.111111 AM
Jones	Hugo	22 Wingfield Cl, Pontypridd CF37 4AB	Willow	11-MAR-22 01.14.03.111111 AM
Tobiah	Mateo	9 Page St, Swansea SA1 4EZ	Antonio Conte	19-MAR-22 09.04.23.112211 AM
Griffith	Otto	26 Page St, Swansea SA1 4EY	Zoe	21-APR-22 02.12.11.111111 AM