

```
CREATE DATABASE IF NOT EXISTS `uas` DEFAULT CHARACTER SET utf8mb4 COLLATE
utf8mb4_unicode_520_ci;
USE `uas`;
```

```
DELIMITER $$
CREATE DEFINER=`root`@`localhost` PROCEDURE `getStaffCount`() BEGIN
SELECT position AS Position, COUNT(position) AS EmpCount
FROM accomstaff
GROUP BY position;
END$$
```

```
DELIMITER ;
```

```
CREATE TABLE `accomstaff` (
  `staffNo` int(11) NOT NULL,
  `fName` varchar(255) COLLATE utf8mb4_unicode_520_ci NOT NULL,
  `lName` varchar(255) COLLATE utf8mb4_unicode_520_ci NOT NULL,
  `street` varchar(255) COLLATE utf8mb4_unicode_520_ci NOT NULL,
  `city` varchar(255) COLLATE utf8mb4_unicode_520_ci NOT NULL,
  `postcode` char(4) COLLATE utf8mb4_unicode_520_ci NOT NULL,
  `DOB` date NOT NULL,
  `sex` enum('Male','Female') COLLATE utf8mb4_unicode_520_ci NOT NULL,
  `position` enum('Hall Manager','Administrative Assisstant','Cleaner') COLLATE utf8mb4_unicode_520_ci NOT
NULL,
  `locaton` enum('Accommodation Office','Hall') COLLATE utf8mb4_unicode_520_ci NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_520_ci;
```

```
CREATE TABLE `advisor` (
  `advisorNo` int(11) NOT NULL,
  `fName` varchar(255) COLLATE utf8mb4_unicode_520_ci NOT NULL,
  `lName` varchar(255) COLLATE utf8mb4_unicode_520_ci NOT NULL,
  `positon` varchar(255) COLLATE utf8mb4_unicode_520_ci NOT NULL,
  `department` varchar(255) COLLATE utf8mb4_unicode_520_ci NOT NULL,
  `intTelNo` char(12) COLLATE utf8mb4_unicode_520_ci NOT NULL,
  `roomNo` char(4) COLLATE utf8mb4_unicode_520_ci NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_520_ci;
```

```
CREATE TABLE `course` (
  `courseNo` int(11) NOT NULL,
  `title` varchar(255) COLLATE utf8mb4_unicode_520_ci NOT NULL,
  `lFName` varchar(255) COLLATE utf8mb4_unicode_520_ci NOT NULL,
  `lLName` varchar(255) COLLATE utf8mb4_unicode_520_ci NOT NULL,
  `intTelNo` char(12) COLLATE utf8mb4_unicode_520_ci NOT NULL,
  `roomNo` char(4) COLLATE utf8mb4_unicode_520_ci NOT NULL,
  `department` varchar(255) COLLATE utf8mb4_unicode_520_ci NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_520_ci;
```

```
CREATE TABLE `flatroom` (
  `flatPlaceNo` int(11) NOT NULL,
  `roomNo` char(4) COLLATE utf8mb4_unicode_520_ci NOT NULL,
  `rentalRate` decimal(11,4) NOT NULL,
  `flatNo` int(11) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_520_ci;
```

```
CREATE TABLE `hallroom` (
  `hallPlaceNo` int(11) NOT NULL,
```

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`roomNo` char(4) COLLATE utf8mb4_unicode_520_ci NOT NULL,
`rentalRate` decimal(11,4) NOT NULL,
`hallNo` int(11) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_520_ci;

```

```

CREATE TABLE `inspection` (
  `staffNo` int(11) NOT NULL,
  `inspectonDate` date NOT NULL,
  `sConditon` enum('Yes','No') COLLATE utf8mb4_unicode_520_ci NOT NULL,
  `comment` varchar(255) COLLATE utf8mb4_unicode_520_ci DEFAULT NULL,
  `flatNo` int(11) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_520_ci;

```

```

CREATE TABLE `invoice` (
  `invoiceNo` int(11) NOT NULL,
  `semester` enum('First Semester','Second Semester','Summer Semester') COLLATE utf8mb4_unicode_520_ci NOT NULL,
  `dueDate` date NOT NULL,
  `amount` decimal(11,4) NOT NULL,
  `leaseNo` int(11) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_520_ci;

```

```

CREATE TABLE `lease` (
  `leaseNo` int(11) NOT NULL,
  `duration` enum('Up To First Semester','Up To Second Semester','Up to Summer Semester') COLLATE utf8mb4_unicode_520_ci NOT NULL,
  `dateMoveIn` date NOT NULL,
  `dateMoveOut` date DEFAULT NULL,
  `studentNo` int(11) NOT NULL,
  `hallPlaceNo` int(11) DEFAULT NULL,
  `flatPlaceNo` int(11) DEFAULT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_520_ci;
DELIMITER $$
CREATE TRIGGER `updateMade` BEFORE UPDATE ON `lease` FOR EACH ROW BEGIN
INSERT INTO update_logs(action, action_time, data1)
VALUES(CONCAT('update from leaseNo:', OLD.leaseNo), NOW(),
OLD.duration);
END
$$
DELIMITER ;

```

```

CREATE TABLE `nok` (
  `studentNo` int(11) NOT NULL,
  `fName` varchar(255) COLLATE utf8mb4_unicode_520_ci NOT NULL,
  `lName` varchar(255) COLLATE utf8mb4_unicode_520_ci NOT NULL,
  `relationship` varchar(255) COLLATE utf8mb4_unicode_520_ci NOT NULL,
  `street` varchar(255) COLLATE utf8mb4_unicode_520_ci NOT NULL,
  `city` varchar(255) COLLATE utf8mb4_unicode_520_ci NOT NULL,
  `postcode` char(4) COLLATE utf8mb4_unicode_520_ci NOT NULL,
  `contactNo` char(12) COLLATE utf8mb4_unicode_520_ci NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_520_ci;

```

```

CREATE TABLE `payment` (
  `datePaid` date NOT NULL,
  `paymentMethod` enum('Cheque','Cash','Digital') COLLATE utf8mb4_unicode_520_ci NOT NULL,
  `invoiceNo` int(11) NOT NULL,
  `studentNo` int(11) NOT NULL

```

```
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_520_ci;
```

```
CREATE TABLE `paymentreminder` (  
  `reminderDate` date NOT NULL,  
  `invoiceNo` int(11) NOT NULL  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_520_ci;
```

```
CREATE TABLE `residencehall` (  
  `hallNo` int(11) NOT NULL,  
  `name` varchar(255) COLLATE utf8mb4_unicode_520_ci NOT NULL,  
  `street` varchar(255) COLLATE utf8mb4_unicode_520_ci NOT NULL,  
  `city` varchar(255) COLLATE utf8mb4_unicode_520_ci NOT NULL,  
  `postcode` char(4) COLLATE utf8mb4_unicode_520_ci NOT NULL,  
  `telNo` char(12) COLLATE utf8mb4_unicode_520_ci NOT NULL,  
  `HMStaffNo` int(11) NOT NULL  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_520_ci;
```

```
CREATE TABLE `student` (  
  `studentNo` int(11) NOT NULL,  
  `fName` varchar(255) COLLATE utf8mb4_unicode_520_ci NOT NULL,  
  `lName` varchar(255) COLLATE utf8mb4_unicode_520_ci NOT NULL,  
  `street` varchar(255) COLLATE utf8mb4_unicode_520_ci NOT NULL,  
  `city` varchar(255) COLLATE utf8mb4_unicode_520_ci NOT NULL,  
  `postcode` char(4) COLLATE utf8mb4_unicode_520_ci NOT NULL,  
  `DOB` date NOT NULL,  
  `sex` enum('Male','Female') COLLATE utf8mb4_unicode_520_ci NOT NULL,  
  `category` enum('Undergraduate Student','Masters Student','PHD Student') COLLATE utf8mb4_unicode_520_ci  
  NOT NULL,  
  `nationality` varchar(255) COLLATE utf8mb4_unicode_520_ci NOT NULL,  
  `smoker` enum('Yes','No') COLLATE utf8mb4_unicode_520_ci NOT NULL,  
  `specialNeeds` varchar(255) COLLATE utf8mb4_unicode_520_ci DEFAULT NULL,  
  `comment` varchar(255) COLLATE utf8mb4_unicode_520_ci DEFAULT NULL,  
  `accomStatus` enum('Placed','Waiting') COLLATE utf8mb4_unicode_520_ci NOT NULL,  
  `courseNo` int(11) NOT NULL,  
  `advisorNo` int(11) NOT NULL  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_520_ci;
```

```
CREATE TABLE `studentflat` (  
  `flatNo` int(11) NOT NULL,  
  `street` varchar(255) COLLATE utf8mb4_unicode_520_ci NOT NULL,  
  `city` varchar(255) COLLATE utf8mb4_unicode_520_ci NOT NULL,  
  `postcode` char(4) COLLATE utf8mb4_unicode_520_ci NOT NULL,  
  `noOfSingleBR` int(4) NOT NULL  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_520_ci;
```

```
CREATE TABLE `update_logs` (  
  `logId` int(11) NOT NULL,  
  `action` varchar(255) COLLATE utf8mb4_unicode_520_ci NOT NULL,  
  `action_time` timestamp NOT NULL DEFAULT current_timestamp() ON UPDATE current_timestamp(),  
  `data1` varchar(255) COLLATE utf8mb4_unicode_520_ci NOT NULL  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_520_ci;  
CREATE TABLE `vallhallmanager` (  
  `hallNo` int(11)  
, `name` varchar(255)  
, `telNo` char(12)  
, `fName` varchar(255)  
, `lName` varchar(255)
```

```

);
CREATE TABLE `v_lease_info` (
  `studentNo` int(11)
, `fname` varchar(255)
, `lname` varchar(255)
, `leaseno` int(11)
, `duration` enum('Up To First Semester','Up To Second Semester','Up to Summer Semester')
, `datemoveout` date
);
CREATE TABLE `with_summer_sem` (
  `leaseNo` int(11)
, `duration` enum('Up To First Semester','Up To Second Semester','Up to Summer Semester')
, `dateMoveIn` date
, `dateMoveOut` date
, `studentNo` int(11)
, `hallPlaceNo` int(11)
, `flatPlaceNo` int(11)
);
DROP TABLE IF EXISTS `vallhallmanager`;

```

```

CREATE ALGORITHM=UNDEFINED DEFINER=`root`@`localhost` SQL SECURITY DEFINER VIEW
`vallhallmanager` AS SELECT `residencehall`.`hallNo` AS `hallNo`, `residencehall`.`name` AS `name`,
`residencehall`.`telNo` AS `telNo`, `accomstaff`.`fName` AS `fName`, `accomstaff`.`lName` AS `lName` FROM
(`residencehall` join `accomstaff` on(`residencehall`.`HMStaffNo` = `accomstaff`.`staffNo`));
DROP TABLE IF EXISTS `v_lease_info`;

```

```

CREATE ALGORITHM=UNDEFINED DEFINER=`root`@`localhost` SQL SECURITY DEFINER VIEW
`v_lease_info` AS SELECT `student`.`studentNo` AS `studentNo`, `student`.`fName` AS `fname`, `student`.`lName`
AS `lname`, `lease`.`leaseNo` AS `leaseno`, `lease`.`duration` AS `duration`, `lease`.`dateMoveOut` AS `datemoveout`
FROM (`lease` join `student` on(`lease`.`studentNo` = `student`.`studentNo`));
DROP TABLE IF EXISTS `with_summer_sem`;

```

```

CREATE ALGORITHM=UNDEFINED DEFINER=`root`@`localhost` SQL SECURITY DEFINER VIEW
`with_summer_sem` AS SELECT `lease`.`leaseNo` AS `leaseNo`, `lease`.`duration` AS `duration`,
`lease`.`dateMoveIn` AS `dateMoveIn`, `lease`.`dateMoveOut` AS `dateMoveOut`, `lease`.`studentNo` AS
`studentNo`, `lease`.`hallPlaceNo` AS `hallPlaceNo`, `lease`.`flatPlaceNo` AS `flatPlaceNo` FROM `lease` WHERE
`lease`.`duration` = 'Up to Summer Semester';

```

```

ALTER TABLE `accomstaff`
  ADD PRIMARY KEY (`staffNo`);

```

```

ALTER TABLE `advisor`
  ADD PRIMARY KEY (`advisorNo`);

```

```

ALTER TABLE `course`
  ADD PRIMARY KEY (`courseNo`);

```

```

ALTER TABLE `flatroom`
  ADD PRIMARY KEY (`flatPlaceNo`),
  ADD KEY `flatNo` (`flatNo`);

```

```

ALTER TABLE `hallroom`
  ADD PRIMARY KEY (`hallPlaceNo`),
  ADD KEY `hallNo` (`hallNo`);

```

```

ALTER TABLE `inspection`

```

```

ADD KEY `staffNo` (`staffNo`),
ADD KEY `flatNo` (`flatNo`);

ALTER TABLE `invoice`
ADD PRIMARY KEY (`invoiceNo`),
ADD KEY `leaseNo` (`leaseNo`);

ALTER TABLE `lease`
ADD PRIMARY KEY (`leaseNo`),
ADD KEY `studentNo` (`studentNo`),
ADD KEY `hallPlaceNo` (`hallPlaceNo`),
ADD KEY `flatPlaceNo` (`flatPlaceNo`);

ALTER TABLE `nok`
ADD KEY `studentNo` (`studentNo`);

ALTER TABLE `payment`
ADD KEY `invoiceNo` (`invoiceNo`),
ADD KEY `studentNo` (`studentNo`);

ALTER TABLE `paymentreminder`
ADD KEY `invoiceNo` (`invoiceNo`);

ALTER TABLE `residencehall`
ADD PRIMARY KEY (`hallNo`),
ADD KEY `HMStaffNo` (`HMStaffNo`);

ALTER TABLE `student`
ADD PRIMARY KEY (`studentNo`),
ADD KEY `courseNo` (`courseNo`),
ADD KEY `advisorNo` (`advisorNo`);

ALTER TABLE `studentflat`
ADD PRIMARY KEY (`flatNo`);

ALTER TABLE `update_logs`
ADD PRIMARY KEY (`logId`);

ALTER TABLE `accomstaff`
MODIFY `staffNo` int(11) NOT NULL AUTO_INCREMENT;

ALTER TABLE `advisor`
MODIFY `advisorNo` int(11) NOT NULL AUTO_INCREMENT;

ALTER TABLE `course`
MODIFY `courseNo` int(11) NOT NULL AUTO_INCREMENT;

ALTER TABLE `flatroom`
MODIFY `flatPlaceNo` int(11) NOT NULL AUTO_INCREMENT;

ALTER TABLE `hallroom`
MODIFY `hallPlaceNo` int(11) NOT NULL AUTO_INCREMENT;

ALTER TABLE `invoice`
MODIFY `invoiceNo` int(11) NOT NULL AUTO_INCREMENT;

```

```
ALTER TABLE `lease`  
  MODIFY `leaseNo` int(11) NOT NULL AUTO_INCREMENT;
```

```
ALTER TABLE `nok`  
  MODIFY `studentNo` int(11) NOT NULL AUTO_INCREMENT;
```

```
ALTER TABLE `residencehall`  
  MODIFY `hallNo` int(11) NOT NULL AUTO_INCREMENT;
```

```
ALTER TABLE `student`  
  MODIFY `studentNo` int(11) NOT NULL AUTO_INCREMENT;
```

```
ALTER TABLE `studentflat`  
  MODIFY `flatNo` int(11) NOT NULL AUTO_INCREMENT;
```

```
ALTER TABLE `update_logs`  
  MODIFY `logId` int(11) NOT NULL AUTO_INCREMENT;
```

```
ALTER TABLE `flatroom`  
  ADD CONSTRAINT `flatroom_ibfk_1` FOREIGN KEY (`flatNo`) REFERENCES `studentflat` (`flatNo`);
```

```
ALTER TABLE `hallroom`  
  ADD CONSTRAINT `hallroom_ibfk_1` FOREIGN KEY (`hallNo`) REFERENCES `residencehall` (`hallNo`);
```

```
ALTER TABLE `inspection`  
  ADD CONSTRAINT `inspection_ibfk_1` FOREIGN KEY (`staffNo`) REFERENCES `accomstaff` (`staffNo`),  
  ADD CONSTRAINT `inspection_ibfk_2` FOREIGN KEY (`flatNo`) REFERENCES `studentflat` (`flatNo`);
```

```
ALTER TABLE `invoice`  
  ADD CONSTRAINT `invoice_ibfk_1` FOREIGN KEY (`leaseNo`) REFERENCES `lease` (`leaseNo`);
```

```
ALTER TABLE `lease`  
  ADD CONSTRAINT `lease_ibfk_1` FOREIGN KEY (`studentNo`) REFERENCES `student` (`studentNo`),  
  ADD CONSTRAINT `lease_ibfk_2` FOREIGN KEY (`hallPlaceNo`) REFERENCES `hallroom` (`hallPlaceNo`),  
  ADD CONSTRAINT `lease_ibfk_3` FOREIGN KEY (`flatPlaceNo`) REFERENCES `flatroom` (`flatPlaceNo`);
```

```
ALTER TABLE `nok`  
  ADD CONSTRAINT `nok_ibfk_1` FOREIGN KEY (`studentNo`) REFERENCES `student` (`studentNo`);
```

```
ALTER TABLE `payment`  
  ADD CONSTRAINT `payment_ibfk_1` FOREIGN KEY (`invoiceNo`) REFERENCES `invoice` (`invoiceNo`),  
  ADD CONSTRAINT `payment_ibfk_2` FOREIGN KEY (`studentNo`) REFERENCES `student` (`studentNo`);
```

```
ALTER TABLE `paymentreminder`  
  ADD CONSTRAINT `paymentreminder_ibfk_1` FOREIGN KEY (`invoiceNo`) REFERENCES `invoice`  
  (`invoiceNo`);
```

```
ALTER TABLE `residencehall`  
  ADD CONSTRAINT `residencehall_ibfk_1` FOREIGN KEY (`HMStaffNo`) REFERENCES `accomstaff`  
  (`staffNo`);
```

```
ALTER TABLE `student`  
  ADD CONSTRAINT `student_ibfk_1` FOREIGN KEY (`courseNo`) REFERENCES `course` (`courseNo`),  
  ADD CONSTRAINT `student_ibfk_2` FOREIGN KEY (`advisorNo`) REFERENCES `advisor` (`advisorNo`);
```