use byxt

DROP TABLE IF EXISTS `保养`

CREATE TABLE `设备类别` (

`id设备类别` int(11) NOT NULL,

`类别名` varchar(45) NOT NULL,

PRIMARY KEY (`id设备类别`),

UNIQUE KEY `类别名\_UNIQUE` (`类别名`)

)

CREATE TABLE `设备` (

`id设备` int(11) NOT NULL,

`设备类别` int(11) NOT NULL,

`设备号` varchar(50) NOT NULL,

PRIMARY KEY (`id设备`),

KEY `设备类别\_idx` (`设备类别`),

CONSTRAINT `FK1` FOREIGN KEY (`设备类别`) REFERENCES `设备类别` (`id设备类别`) ON DELETE NO ACTION ON UPDATE NO ACTION

)

CREATE TABLE `检修类型` (

`id检修类型` int(11) NOT NULL,

`检修周期` int(11) NOT NULL,

PRIMARY KEY (`id检修类型`)

)

CREATE TABLE `保养` (

`id保养` int(11) NOT NULL,

`设备类别id` int(11) NOT NULL,

`设备id` int(11) NOT NULL,

`检修类型id` int(11) NOT NULL,

PRIMARY KEY (`id保养`,`设备类别id`,`设备id`),

KEY `FK2\_idx` (`设备类别id`),

KEY `FK3\_idx` (`设备id`),

KEY `FK4\_idx` (`检修类型id`),

CONSTRAINT `FK2` FOREIGN KEY (`设备类别id`) REFERENCES `设备类别` (`id设备类别`) ON DELETE NO ACTION ON UPDATE NO ACTION,

CONSTRAINT `FK3` FOREIGN KEY (`设备id`) REFERENCES `设备` (`id设备`) ON DELETE NO ACTION ON UPDATE NO ACTION,

CONSTRAINT `FK4` FOREIGN KEY (`检修类型id`) REFERENCES `检修类型` (`id检修类型`) ON DELETE NO ACTION ON UPDATE NO ACTION

)

CREATE TABLE `保养记录` (

`id保养记录` int(11) NOT NULL,

`保养id` int(11) NOT NULL,

`保养人` varchar(10) NOT NULL,

`保养日期` date NOT NULL,

`保养班组` varchar(20) NOT NULL,

PRIMARY KEY (`id保养记录`,`保养id`),

KEY `FK7\_idx` (`保养id`),

CONSTRAINT `FK7` FOREIGN KEY (`保养id`) REFERENCES `保养` (`id保养`) ON DELETE NO ACTION ON UPDATE NO ACTION

)

CREATE TABLE `保养项目` (

`id保养项目` int(11) NOT NULL,

`设备类别id` int(11) NOT NULL,

`保养内容` varchar(100) NOT NULL,

PRIMARY KEY (`id保养项目`),

KEY `FK6\_idx` (`设备类别id`),

CONSTRAINT `FK6` FOREIGN KEY (`设备类别id`) REFERENCES `设备类别` (`id设备类别`) ON DELETE NO ACTION ON UPDATE NO ACTION

)

CREATE TABLE `配件` (

`id配件` int(11) NOT NULL,

`配件名称` varchar(20) NOT NULL,

PRIMARY KEY (`id配件`)

) CREATE TABLE `修理` (

`id修理` int(11) NOT NULL,

`保养记录id` int(11) NOT NULL,

`材料配件id` int(11) DEFAULT NULL,

`是否完好` varchar(2) NOT NULL,

`材料配件数量` varchar(45) DEFAULT NULL,

PRIMARY KEY (`id修理`),

KEY `FK8\_idx` (`材料配件id`),

CONSTRAINT `FK10` FOREIGN KEY (`材料配件id`) REFERENCES `配件` (`id配件`) ON DELETE NO ACTION ON UPDATE NO ACTION

)

USE byxt;

select 材料配件id,SUM(材料配件数量) as 数量

from 保养记录 BJ,保养 B,修理 S,配件 P

where B.设备id=1 and BJ.保养id=B.id保养 and S.保养记录id=BJ.id保养记录 and P.id配件=S.材料配件id

GROUP BY S.材料配件id

select B.设备id,BJ.id保养记录,BJ.保养人,BJ.保养日期,BJ.保养班组

from 保养记录 BJ,保养 B

where B.设备id=1 and BJ.保养id=B.id保养

select B.设备id,BX.保养内容,S.是否完好 AS 是否完好

from 保养 B,保养项目 BX,修理 S,保养记录 BJ

where BX.设备类别id=B.设备类别id and B.设备id=1 and S.保养记录id=BJ.id保养记录 and BJ.保养id=B.id保养

select SB.设备号

from 设备 SB,检修类型 JX,(select B.设备id as id,max(BJ.保养日期) as timee from 保养记录 BJ,保养 B group by B.设备id) AS T

where T.id=SB.id设备 and JX.检修周期-DATEDIFF(now(),T.timee)<4

select DATEDIFF(now(),T.timee)

from (select B.设备id as id,max(BJ.保养日期) as timee from 保养记录 BJ,保养 B group by B.设备id) AS T