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Last login: Wed Apr 17 22:43:47 2019 from 192.168.60.3
gwolf@vma25:~$ cd class/a07/q04
gwolf@vma25:~/class/a07/q04$ ls
a04.bak  a04.txt  check04.sh  env_mysql  model.sh  q02.sql  q04.sh  report.tmp
gwolf@vma25:~/class/a07/q04$ cat model.sh
#!/bin/bash
```

```
year=$1
model=$2
type=$3

if [ -z $year ] || [ -z $model ] || [ -z $type ] ; then
    echo "missing parameter"
    exit
fi

if [ -e env_mysql ]; then
    source env_mysql
fi

echo "use sales;" > q02.sql
if [ $type == "new" ] || [ $type == "used" ]; then
    echo "select count(*), sum(dealer_cost), sum(price_sold), sum(price_list) from sales_$year
where model_name=\"$model\" and sales_type=\"$type\";" >> q02.sql
elif [ $type == "all" ]; then
    echo "select count(*), sum(dealer_cost), sum(price_sold), sum(price_list) from sales_$year
where model_name=\"$model\";" >> q02.sql
else
    exit
fi

#arr=$( mysql -u $MYSQLU -p$MYSQLP 2>/dev/null -N < q02.sql )
arr=( $( mysql -u $MYSQLU -p$MYSQLP < q02.sql 2>/dev/null -N | grep -v 'COUNT' ) )

for i in {0..3}; do
    if [ ${arr[$i]} == "NULL" ]; then
        arr[$i]=0
    fi
done

echo $year ${arr[@]}
```

```
gwolf@vma25:~/class/a07/q04$ cat q04.sh
```

```
#!/bin/bash
```

```
model=$1
```

```
if [ -z $model ]; then
    echo "missing parameter"
    exit
fi
```

```
models=( "Accord" "Civic" "Crosstour" "CR-V" "CR-Z" "Fit" "Insight" "Odyssey" "Pilot" "Ridgeline" )
if [[ ! "${models[@]}" =~ "${model}" ]]; then
    echo "model name not valid"
    if [ -e report.tmp ]; then
        rm report.tmp
    fi
    exit
fi
```

```
if [ -e env_mysql ]; then
    source env_mysql
fi
```

```
if [ -L model.sh ]; then
    rm model.sh
    ln -s ../q02/q02.sh model.sh
else
    ln -s ../q02/q02.sh model.sh
fi
```

```
echo "Model: $model" > report.tmp
for type in all new used; do
```

```
echo "Type: $type" >> report.tmp
for year in {2010..2016}; do
    sales=( $( ./model.sh $year $model $type) )
    number=${sales[1]}
    dcost=${sales[2]}
    psold=${sales[3]}
    plist=${sales[4]}
    profit=$(( $psold - $dcost ))
    discount=$(( $plist - $psold ))
    ave_profit=$(( echo "scale=2;$profit/$number" | bc ))
    ave_discount=$(( echo "scale=2;$discount/$number" | bc ))
    printf "%4s %9s %11s %10s %10s %10s %10s %8s %9s\n" $( echo ${sales[@]} $profit
$discount $ave_profit $ave_discount ) >> report.tmp
done
done
```

```
gwolf@vma25:~/class/a07/q04$ ./q04.sh Accord
```

```
gwolf@vma25:~/class/a07/q04$ cat report.tmp
```

Model: Accord

Type: all

2010	8740	169981033	207506341	231531444	37525308	24025103	4293.51	2748.86
2011	9196	178674751	220014590	242978384	41339839	22963794	4495.41	2497.15
2012	9677	188017177	233507347	255804189	45490170	22296842	4700.85	2304.10
2013	10682	207703991	260063619	281158271	52359628	21094652	4901.66	1974.78
2014	11778	223408900	290405479	310384537	66996579	19979058	5688.28	1696.30
2015	13276	252427563	330592262	350356055	78164699	19763793	5887.66	1488.68
2016	14183	266271074	355183459	373543720	88912385	18360261	6268.94	1294.52

Type: new

2010	7848	157211405	191890902	207518507	34679497	15627605	4418.89	1991.28
2011	8261	165339397	203693294	218250301	38353897	14557007	4642.76	1762.13
2012	8694	174134933	216259189	229858011	42124256	13598822	4845.21	1564.16
2013	9778	194897995	244029538	257284290	49131543	13254752	5024.70	1355.56
2014	10894	217463520	274556890	287066444	57093370	12509554	5240.80	1148.29
2015	12286	245698407	312806523	324329407	67108116	11522884	5462.16	937.88
2016	13145	262111071	336336523	346009909	74225452	9673386	5646.66	735.89

Type: used

2010	892	12769628	15615439	24012937	2845811	8397498	3190.37	9414.23
2011	935	13335354	16321296	24728083	2985942	8406787	3193.52	8991.21
2012	983	13882244	17248158	25946178	3365914	8698020	3424.12	8848.44
2013	904	12805996	16034081	23873981	3228085	7839900	3570.89	8672.45
2014	884	5945380	15848589	23318093	9903209	7469504	11202.72	8449.66
2015	990	6729156	17785739	26026648	11056583	8240909	11168.26	8324.15
2016	1038	4160003	18846936	27533811	14686933	8686875	14149.26	8368.85

```
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```