The Main Menu:-

*The system's main menu is printed the moment you run the program :

```
1) view workers
2) view shifts
3) exit
```

In the main menu you can either view the workers menu , the shift menu or exit the program.

1)View Workers :

By choosing this option the system will print a list which represents the workers in the company in the following format :

```
222222222 , Steve : [Cashier, Cleaning, Delivery]
444444444 , Moshe : [Cashier, Cleaning, Delivery]
666666666 , Iris : [Cashier, Cleaning, Delivery]
111111111 , John : [Cashier, Cleaning, Delivery]
333333333 , James : [Cashier, Cleaning, Delivery]
555555555 , Asd : [Cashier, Cleaning, Delivery]

1) Register a worker
2) select a worker
3) return
```

--   Worker ID , Worker Name , [The jobs that the worker can do] --

1.1) Registering a worker

If you are interested in adding a new worker to the database choose the "register a worker " option and it will automatically start a progress which will ask you to fill some essential details and info about the new worker you wish to add. Here is a detailed example:

```
Worker id:
999999999
Worker name:
workerX
Working types :
1) Cashier
2) Delivery
3) Cleaning
Choose one of the working types :
1
choose another ? y/n
y
Choose one of the working types :
2
choose another ? y/n
n
Enter constraints :
Student
Worker salary :
28.17
Worker bank address :
Address
```

If you wish to allow the worker to work more than one job when asked to "choose another ? y/n " type "y" and hit Enter , then you can type another number for the "Worker types " list , you can continue to add job types to the worker and when you decide the its enough type "n" as an answer to the popup "choose another ? y/n.

Important note : the registering date of the worker will be the starting date for him in his contract!

After registering the new worker , he should appear in the " view workers " list :

```
222222222 , Steve : [Cashier, Cleaning, Delivery]
444444444 , Moshe : [Cashier, Cleaning, Delivery]
999999999 , workerX : [Cashier, Delivery]
666666666 , Iris : [Cashier, Cleaning, Delivery]
111111111 , John : [Cashier, Cleaning, Delivery]
333333333 , James : [Cashier, Cleaning, Delivery]
555555555 , Asd : [Cashier, Cleaning, Delivery]

1) Register a worker
2) select a worker
3) return
```

1.2) Worker info

if you're rather interested in viewing more details about the workers (such as his working shifts , contract etc.) or editing his info then choose the "select a worker option " , you will be required to type the id of this worker , then the user basic details will be printed on the screen followed by a list options that you can choose from :

```
1) Register a worker
2) select a worker
3) return

2
enter the worker id :
999999999
--------------------------------
Worker name : workerX
Worker id : 999999999
jobs : [Cashier, Delivery]

1) print Schedule
2) print contract
3) print working shifts
4) edit worker info
5) return
```

1.2.1) Print schedule

to view the worker's schedule, which represents the time he can work in according to his constraints, select the "print schedule " option , it will print the schedule in this format :

```
1) print Schedule
2) print contract
3) print working shifts
4) edit worker info
5) return
1
SUNDAY , Morning : true
SUNDAY , Evening : true
MONDAY , Morning : true
MONDAY , Evening : true
TUESDAY , Morning : true
TUESDAY , Evening : true
WEDNESDAY , Morning : true
WEDNESDAY , Evening : true
THURSDAY , Morning : true
THURSDAY , Evening : true
FRIDAY , Morning : true
FRIDAY , Evening : true
SATURDAY , Morning : true
SATURDAY , Evening : true
--------------------------------
```

-- Day , Shift Time : CanWork? --

Note: canWork? does not mean that the worker is available, it means that he can work but maybe he is already signed for a shift at that time.

For more details check the shift view session.

1.2.2) Print Worker's Contract

if you wish to view the worker's contract, then you should select the "print contract "option , it will be printed in this format :

```
1) print Schedule
2) print contract
3) print working shifts
4) edit worker info
5) return
2
worker id : 999999999
start date : 22/04/2020
bank address : Address
salary : 28.17
working conditions : []
```

1.2.3) Print Worker's Shifts

to view the shifts that the worker is part of, choose "print working shifts " :

```
1) print Schedule
2) print contract
3) print working shifts
4) edit worker info
5) return
3
shift id : 0
shift date : 13/04/2020
shift type : Monday , Morning
shift boss : John
Working team :-
{
Delivery staff :
222222222 , Steve : [Cashier, Cleaning, Delivery]
}

shift id : 1
shift date : 14/04/2020
shift type : Tuesday , Evening
shift boss : Steve
Working team :-
{
Cleaning staff :
222222222 , Steve : [Cashier, Cleaning, Delivery]
}
```

1.2.4) Edit worker's Info

you can edit the worker's details using the "edit worker details "
feature , which has a handful of options. Simply choose the desired
piece of info you wish to edit and type the new value, you can see the
updated worker from the "worker view " option we saw earlier :

```
Worker name : Steve
Worker id : 222222222
jobs : [Cashier, Cleaning, Delivery]

1) print Schedule
2) print contract
3) print working shifts
4) edit worker info
5) return
4
1) Edit worker name
2) Edit worker id
3) Edit worker jobs
4) Edit worker bank address
5) Edit worker salary
6) Return
1
Type the new name :
Nash
```

Result:

```
Type the new name :
Nash
1) Edit worker name
2) Edit worker id
3) Edit worker jobs
4) Edit worker bank address
5) Edit worker salary
6) Return
6
-----------------------------------
Worker name : Nash
Worker id : 222222222
jobs : [Cashier, Cleaning, Delivery]

1) print Schedule
2) print contract
3) print working shifts
4) edit worker info
5) return
```

2)View Shifts

From the main menu you can view all the shifts:

```
1) view workers
2) view shifts
3) exit
2
shift id : 0
shift date : 13/04/2020
shift type : Monday , Morning
shift boss : John
Working team :-
{
}


---------------------------------
shift id : 1
shift date : 14/04/2020
shift type : Tuesday , Evening
shift boss : Steve
Working team :-
{
}


---------------------------------
```

Here we see that there are 2 shifts in the shift history .

2.1) Add worker to a shift/print available workers for a shift

you can add workers to a shift by selecting it first , choose the "select shift" option and then type its id , you will be given an open to print the available workers for this shift , alongside which jobs they can do , to do so choose the "print available workers for this shift" option :

```
1) select a shift
2) create a shift
3) return
1
enter the shift id :
1

-------------------------------
shift id : 1
shift date : 14/04/2020
shift type : Tuesday , Evening
shift boss : Steve
Working team :-
{
}

1) print available workers for this shift
2) return
1
[222222222 , Steve : [Cashier, Cleaning, Delivery], 444444444 , Moshe : [Cashier, Cleaning, Delivery],
1) add a worker to this shift
2) return
```

Here we can see that the worker Steve, who has an id number 222222222, is available to work in this shift, he can work as a Cashier , Cleaner or as a delivery guy. If you wish to add him to the shift choose the "add a worker to this shift" option , then type his id , you will then be asked to choose which task he will take in this shift :

```
[222222222 , Steve : [Cashier, Cleaning, Delivery], 444444444 , Moshe : [Cashier, Cleaning, Delivery],
1) add a worker to this shift
2) return
1
enter the id of the worker you want to add
222222222
which job will Steve do?
1) Cashier
2) Cleaning
3) Delivery
3

-------------------------------
shift id : 1
shift date : 14/04/2020
shift type : Tuesday , Evening
shift boss : Steve
Working team :-
{
Delivery staff :
222222222 , Steve : [Cashier, Cleaning, Delivery]
}

1) print available workers for this shift
2) return
```

In this example we chose to make Steve a delivery guy, notice that after we asked to add him to the shift he was added to it and to the right staff (Delivery staff).

A very important note : even though Steve is the boss in this shift he can also work in it because he is after all a worker , and in supermarkets even the shift boss can take a job (often a prestigious one) , but a job is a job :)

2.2) Create A Shift

if you wish to make a new shift, choose the " create a shift " option from the "view Shifts" menu . you will be asked to enter a few details such as : the shift date (be attention to the format !!) , the shift time(is it morning or evening ?) , and choosing the boss from the available workers at that time , for example :

```
1) select a shift
2) create a shift
3) return
2
enter the date using this format dd/mm/yyyy or type EXIT to cancel ...
23/04/2020
Your shift date will be : Thursday 23/04/2020
Type M for Morning , Type E for Evening
E
222222222 , Steve : [Cashier, Cleaning, Delivery]
444444444 , Moshe : [Cashier, Cleaning, Delivery]
666666666 , Iris : [Cashier, Cleaning, Delivery]
111111111 , John : [Cashier, Cleaning, Delivery]
333333333 , James : [Cashier, Cleaning, Delivery]
555555555 , Asd : [Cashier, Cleaning, Delivery]
enter the id of the worker who you wish to appoint as a boss
666666666
The shift has been created successfully
```

After creating the shift, it should appear in the "View Shifts" menu:

```
shift id : 2
shift date : 23/04/2020
shift type : Thursday , Evening
shift boss : Iris
Working team :-
{
}
```

General important notes:-

1) Unless its stated otherwise, in order to select an option from a selection menu you should type the number in the beginning. Number) OPTION

2) When asked to type something into console , DO NOT type a line with any spaces , also please try to stay at the bounds of the options and do not try to test the system's stability (for example when asked for salary value type a number , when asked to choose an option from the menu or a list type a positive Integer , unless it is stated otherwise).

3) For now, a new created worker can work every day at any shift time, regardless what his constraints are.