

## Sample Output for PA4

1. Display all the constructor calls along with the addresses of objects of Node and Employee

```
gp@CS:~/CMSC2613/S2020/PA4$ ./pa4
DB() is called
Node(string, Node*): 0x563a0e70e520 is called
Employee(string) : 0x563a0e70e540 is called
Node(string, Node*): 0x563a0e70e730 is called
Employee(string) : 0x563a0e70e750 is called
Node(string, Node*): 0x563a0e70e830 is called
Employee(string) : 0x563a0e70e850 is called
Node(string, Node*): 0x563a0e70e930 is called
Employee(string) : 0x563a0e70e950 is called
Node(string, Node*): 0x563a0e70ea30 is called
Employee(string) : 0x563a0e70ea50 is called
Node(string, Node*): 0x563a0e70eb30 is called
Employee(string) : 0x563a0e70eb50 is called
Node(string, Node*): 0x563a0e70ec30 is called
Employee(string) : 0x563a0e70ec50 is called
Node(string, Node*): 0x563a0e70ed30 is called
Employee(string) : 0x563a0e70ed50 is called
Node(string, Node*): 0x563a0e70ee30 is called
Employee(string) : 0x563a0e70ee50 is called
Node(string, Node*): 0x563a0e70ef30 is called
Employee(string) : 0x563a0e70ef50 is called
Node(string, Node*): 0x563a0e70f060 is called
Employee(string) : 0x563a0e70f0b0 is called
Node(string, Node*): 0x563a0e70f190 is called
Employee(string) : 0x563a0e70f1b0 is called
Node(string, Node*): 0x563a0e70f290 is called
Employee(string) : 0x563a0e70f2b0 is called
Node(string, Node*): 0x563a0e70f390 is called
Employee(string) : 0x563a0e70f3b0 is called
Node(string, Node*): 0x563a0e70f490 is called
Employee(string) : 0x563a0e70f4b0 is called
Node(string, Node*): 0x563a0e70f590 is called
Employee(string) : 0x563a0e70f5b0 is called
Node(string, Node*): 0x563a0e70f690 is called
Employee(string) : 0x563a0e70f6e0 is called
Node(string, Node*): 0x563a0e70f7c0 is called
Employee(string) : 0x563a0e70f810 is called
Node(string, Node*): 0x563a0e70f8f0 is called
Employee(string) : 0x563a0e70f910 is called
Node(string, Node*): 0x563a0e70f9f0 is called
Employee(string) : 0x563a0e70fa40 is called
Node(string, Node*): 0x563a0e70fb20 is called
Employee(string) : 0x563a0e70fb40 is called
Node(string, Node*): 0x563a0e70fc20 is called
Employee(string) : 0x563a0e70fc40 is called
Node(string, Node*): 0x563a0e70fd20 is called
Employee(string) : 0x563a0e70fd40 is called
```

2. Display the information of employees in the DB after reading the file.

The output must be the reverse order of the one used in PA3.

Type	SSN	Lastname	Firstname	Department	Role	Salary
S	429-30-3678	Finley	Megan	Administration	OfficeManager	80000.00
S	505-55-8786	Byron	Amanda	Sales	SalesAssociate	70000.00
S	478-77-2763	Weaver	Daniel	Sales	SalesManager	70000.00
S	486-88-9981	Arthur	Dennis	AccountFinance	Accountant	60000.00
S	433-44-2324	Sellters	Sandra	AccountFinance	AccountingManager	200000.00
S	425-90-2010	Sharma	Sanjeev	DevOps	WorldwideLead	350000.00
S	408-12-8976	Thomson	Stewart	DevOps	DeploymentEngineer	250000.00
S	509-45-0909	Park	Joshua	SecOps	SecurityArchitect	250000.00
S	627-67-9879	Rogers	Andrew	Devops	SystemAdmin	100000.00
S	251-98-2836	Wright	Davia	Devops	CloudArchitect	200000.00
S	407-36-1285	Hall	Elijah	DevOps	QAEngineer	100000.00
S	222-35-9324	Youn	Joshua	DevOps	ScrumMaster	150000.00
S	035-35-6472	Allen	Avery	DevOps	TechnicalLead	250000.00
S	530-46-8245	Johnson	Grace	SecOps	SecurityEngineer	300000.00
S	526-47-2435	Smith	Natalie	DevOps	Developer	130000.00
S	516-34-6524	Morris	Daniel	DevOps	ProductOwner	300000.00
S	408-67-8234	Cook	Choloe	DevOps	QAEngineer	100000.00
S	501-56-9724	Rogers	Mia	DevOps	Auditor	90000.00
S	581-23-4536	Jones	Jayden	SecOps	Pentester	250000.00
S	237-12-1289	Miller	Mason	DevOps	CloudArchitect	80000.00
S	252-34-6728	William	Emma	DevOps	DBExpert	100000.00
S	135-67-5462	Johnaon	Jacob	SecOps	Pentester	130000.00
S	135-25-1234	Smith	Sophia	DevOps	Developer	70000.00

3. Remove three employees in the Last-In First-Out fashion & Display the DB

```

Delete 3 nodes from the most recently inserted node.
~Node() : 0x563a0e70fd20 is called
~Employee() : 0x563a0e70fd40 is called
~Node() : 0x563a0e70fc20 is called
~Employee() : 0x563a0e70fc40 is called
~Node() : 0x563a0e70fb20 is called
~Employee() : 0x563a0e70fb40 is called

```

Type	SSN	Lastname	Firstname	Department	Role	Salary
S	486-88-9981	Arthur	Dennis	AccountFinance	Accountant	60000.00
S	433-44-2324	Sellters	Sandra	AccountFinance	AccountingManager	200000.00
S	425-90-2010	Sharma	Sanjeev	DevOps	WorldwideLead	350000.00
S	408-12-8976	Thomson	Stewart	DevOps	DeploymentEngineer	250000.00
S	509-45-0909	Park	Joshua	SecOps	SecurityArchitect	250000.00
S	627-67-9879	Rogers	Andrew	Devops	SystemAdmin	100000.00
S	251-98-2836	Wright	Davia	Devops	CloudArchitect	200000.00
S	407-36-1285	Hall	Elijah	DevOps	QAEngineer	100000.00
S	222-35-9324	Youn	Joshua	DevOps	ScrumMaster	150000.00
S	035-35-6472	Allen	Avery	DevOps	TechnicalLead	250000.00
S	530-46-8245	Johnson	Grace	SecOps	SecurityEngineer	300000.00
S	526-47-2435	Smith	Natalie	DevOps	Developer	130000.00
S	516-34-6524	Morris	Daniel	DevOps	ProductOwner	300000.00
S	408-67-8234	Cook	Choloe	DevOps	QAEngineer	100000.00
S	501-56-9724	Rogers	Mia	DevOps	Auditor	90000.00
S	581-23-4536	Jones	Jayden	SecOps	Pentester	250000.00
S	237-12-1289	Miller	Mason	DevOps	CloudArchitect	80000.00
S	252-34-6728	William	Emma	DevOps	DBExpert	100000.00
S	135-67-5462	Johnaon	Jacob	SecOps	Pentester	130000.00
S	135-25-1234	Smith	Sophia	DevOps	Developer	70000.00

4. Display the sequence of the destructor calls along with the address of the objects of Node and Employee.

```
~DB() is called
~Node() : 0x55bc9c21f9f0 is called
~Employee() : 0x55bc9c21fa40 is called
~Node() : 0x55bc9c21f8f0 is called
~Employee() : 0x55bc9c21f910 is called
~Node() : 0x55bc9c21f7c0 is called
~Employee() : 0x55bc9c21f810 is called
~Node() : 0x55bc9c21f690 is called
~Employee() : 0x55bc9c21f6e0 is called
~Node() : 0x55bc9c21f590 is called
~Employee() : 0x55bc9c21f5b0 is called
~Node() : 0x55bc9c21f490 is called
~Employee() : 0x55bc9c21f4b0 is called
~Node() : 0x55bc9c21f390 is called
~Employee() : 0x55bc9c21f3b0 is called
~Node() : 0x55bc9c21f290 is called
~Employee() : 0x55bc9c21f2b0 is called
~Node() : 0x55bc9c21f190 is called
~Employee() : 0x55bc9c21f1b0 is called
~Node() : 0x55bc9c21f060 is called
~Employee() : 0x55bc9c21f0b0 is called
~Node() : 0x55bc9c21ef30 is called
~Employee() : 0x55bc9c21ef50 is called
~Node() : 0x55bc9c21ee30 is called
~Employee() : 0x55bc9c21ee50 is called
~Node() : 0x55bc9c21ed30 is called
~Employee() : 0x55bc9c21ed50 is called
~Node() : 0x55bc9c21ec30 is called
~Employee() : 0x55bc9c21ec50 is called
~Node() : 0x55bc9c21eb30 is called
~Employee() : 0x55bc9c21eb50 is called
~Node() : 0x55bc9c21ea30 is called
~Employee() : 0x55bc9c21ea50 is called
~Node() : 0x55bc9c21e930 is called
~Employee() : 0x55bc9c21e950 is called
~Node() : 0x55bc9c21e830 is called
~Employee() : 0x55bc9c21e850 is called
~Node() : 0x55bc9c21e730 is called
~Employee() : 0x55bc9c21e750 is called
~Node() : 0x55bc9c21e520 is called
~Employee() : 0x55bc9c21e540 is called
gp@CS:~/CMSC2613/S2020/PA4$
```