

LE2 PART B

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2.

```
#include<iostream>
using namespace std;
//a) node struct definition
struct node{
string name;
string emp_id;
int age;
node* link; //link to next node
};
int main(){
//b) creating head node
node* head=NULL;
//building the list as given in the question
head=new node();
head->name="Aiman";
head->emp_id="A1234";
head->age=24;
head->link=new node();
head->link->name="Ahmad";
head->link->emp_id="A2345";
head->link->age=32;
head->link->link=new node();
head->link->link->name="Aida";
head->link->link->emp_id="A3456";
head->link->link->age=22;
head->link->link->link=NULL;
//c) accessing and printing contents of head node (only)
cout<<"Employee Name: "<<head->name<<endl;
cout<<"Employee ID: "<<head->emp_id<<endl;
cout<<"Age: "<<head->age<<endl;
//d) creating a new node, adding before head
node* newNode=new node();
newNode->name="Asmah";
newNode->emp_id="A2835";
newNode->age=30;
newNode->link=head;
```

```

//setting newNode as new head
head=newNode;
//you may write code to print the whole list here if you want. I'm
ignoring
//it as it is not mentioned in the question. also, while on the process,
//deallocate memory of nodes too.
return 0;
}

```

OUTPUT :

```

Employee Name: Aiman
Employee ID: A1234
Age: 24

```

3.

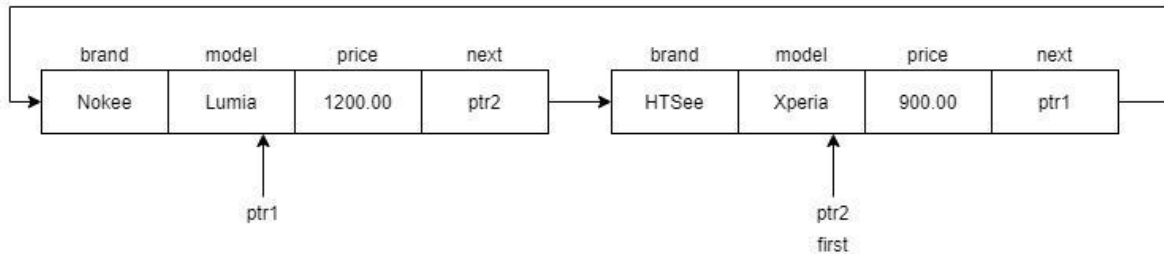
a.

```

nodePhone *ptr1 = new nodePhone("Nokee", "Lumia", 1200.00);
nodePhone *ptr2 = new nodePhone("HTSee", "Desire", 900.00);

```

b.



c.

```

first = first->next;
delete current;

```

d.

```

first->next = current->next;
delete current;

```

e.

```

cout << "List of Affordable Smart Phones\n\n";
for(nodePhone *ptr = first; ptr != NULL; ptr = ptr->next){
if (ptr->price < 2000){
cout << "Brand: " << ptr->brand << endl;
cout << "Model: " << ptr->model << endl;
cout << "Price: RM" << ptr->price << endl;
}
}

```

```
cout << "The phone is affordable for students: " << endl << endl;  
}  
}
```