DS Lab KCS351 - A1

22 Sep 2022 - Linked List Application - Polynomial Representation

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TOPIC :

make the expression: 4x**3 + 3x**2 + 10

```
// ABHISHEK RAJPUT
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#include <iostream>
using namespace std;
    struct poly
{
    int coefficient;
    int power;
    struct poly*next;

};
int main(){
    struct poly n1,n2,n3,*head,*temp,*tail;
```

```
    head=&n1;
    n1.coefficient=4;
    n1.power=3;
    n1.next=&n2;

    n2.coefficient=3;
    n2.power=2;
    n2.next=&n3;

    n3.coefficient=10;
    n3.power=0;
    n3.next=NULL;

    temp=head;
    tail = &n3;

    while(temp != NULL){
        cout<<temp->coefficient<<"x**"<<temp-
>power;
        if(temp!=tail){
            cout<<"+";
        }
```

```
        temp=temp->next;
    }


    return 0;
}
```

```cpp
#include <iostream>
using namespace std;
    struct poly
{
    int coefficient;
    int power;
    struct poly*next;

};
int main(){
    struct poly n1,n2,n3,*head,*temp,*tail;
    head=&n1;
    n1.coefficient=4;
    n1.power=3;
    n1.next=&n2;

    n2.coefficient=3;
    n2.power=2;
    n2.next=&n3;

    n3.coefficient=10;
    n3.power=0;
    n3.next=NULL;

    temp=head;
    tail = &n3;

    while(temp != NULL){
        cout<<temp->coefficient<<"x**"<<temp->power;
        if(temp!=tail){
            cout<<"+";
        }
        temp=temp->next;
    }

    return 0;
}
```

OUTPUT

```
4x**3+3x**2+10x**0

...Program finished with exit code 0
Press ENTER to exit console.
```