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#include<stdio.h>
#include<stdlib.h>
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struct Node
{
    int coeff;
    int pow;
    struct Node* next;
};
```

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void readPolynomial(struct Node** poly)
{
    int coeff, exp, cont;
    struct Node* temp = (struct Node*)malloc(sizeof(struct Node));
    *poly = temp;
    do{
        printf("\n Coeffecient: ");
        scanf("%d", &coeff);
        printf("\n Exponent: ");
        scanf("%d", &exp);
        temp->coeff = coeff;
        temp->pow = exp;
        temp->next = NULL;
        printf("\nHave more terms? 1 for y and 0 for no: ");
        scanf("%d", &cont);
        if(cont)
        {
            temp->next = (struct Node*)malloc(sizeof(struct Node));
            temp = temp->next;
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        temp->next = NULL;
    }
}while(cont);
}

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void displayPolynomial(struct Node* poly)
{
    printf("\nPolynomial expression is: ");
    while(poly != NULL)
    {
        printf("%dX^%d", poly->coeff, poly->pow);
        poly = poly->next;
        if(poly != NULL)
            printf("+");
    }
}

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void addPolynomials(struct Node** result, struct Node* first, struct Node* second)
{
    struct Node* temp = (struct Node*)malloc(sizeof(struct Node));
    temp->next = NULL;
    *result = temp;
    while(first && second)
    {
        if(first->pow > second->pow)
        {
            temp->coeff = first->coeff;
            temp->pow = first->pow;
            first = first->next;

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    }
    else if(first->pow < second->pow)
    {
        temp->coeff = second->coeff;
        temp->pow = second->pow;
        second = second->next;
    }
    else
    {
        temp->coeff = first->coeff + second->coeff;
        temp->pow = first->pow;
        first = first->next;
        second = second->next;
    }

    if(first && second)
    {
        temp->next = (struct Node*)malloc(sizeof(struct Node));
        temp = temp->next;
        temp->next = NULL;
    }
}

while(first || second)
{
    temp->next = (struct Node*)malloc(sizeof(struct Node));
    temp = temp->next;
    temp->next = NULL;

    if(first)

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        {
            temp->coeff = first->coeff;
            temp->pow = first->pow;
            first = first->next;
        }

    else if(second)
    {
        temp->coeff = second->coeff;
        temp->pow = second->pow;
        second = second->next;
    }
}

int main()
{

    struct Node* first = NULL;
    struct Node* second = NULL;
    struct Node* result = NULL;

    printf("\nEnter the corresponding data:-\n");
    printf("\nFirst polynomial:\n");
    readPolynomial(&first);
//    displayPolynomial(first);
    printf("\nSecond polynomial:\n");
    readPolynomial(&second);
    displayPolynomial(first);

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    displayPolynomial(second);  
    addPolynomials(&result, first, second);  
    displayPolynomial(result);  
    return 0;  
}
```