

Explorer

C PolyLLMai... x

C AddPolyL... x

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```
1 struct polynomial
2 {
3     int coeff;
4     int exp;
5     struct polynomial *next;
6 };
7
8 typedef struct polynomial *poly;
9
10
11 poly addTerm(poly head, poly temp)
12 {
13     poly p1;
14     p1 = head;
15     poly p2;
16     p2 = head;
17
18     if(p1 == NULL)
19     {
20         head = temp;
21     }
22     else
23     {
24         while(p1 != NULL && p1->exp > temp->exp)
25         {
26             p2 = p1;
27             p1 = p1->next;
28         }
29
30         if(p1 == NULL)
31         {
32             p2->next = temp;
33         }
34
35         else if(p1->exp == temp->exp)
36         {
37             p1->coeff = p1->coeff + temp->coeff;
38         }
39
40         else if(p1->exp < temp->exp)
41         {
42             if(p1 == p2)
43             {
```

Debugger

Plots

< Prev

Reset

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Next >

```
45         temp->next = p1;
46         head = temp;
47     }
48     else
49     {
50         temp->next = p1;
51         p2->next = temp;
52     }
53
54 }
55
56 }
57
58
59 return head;
60
61 }
62
63
64 void print(poly head) {
65     poly temp = head;
66     while (temp != NULL) {
67         printf("%d.X^%d---> ", temp->coeff, temp->exp);
68         temp = temp->next;
69     }
70     printf("NULL\n");
71 }
72
73
74
75 poly add(poly head1, poly head2) {
76     {
77         poly ans = NULL;
78
79         poly temp1 = head1;
80
81         while (temp1 != NULL) {
82             {
83                 poly temp = malloc(sizeof(struct polynomial));
84                 temp->next = NULL;
85                 temp->coeff = temp1->coeff;
86                 temp->exp = temp1->exp;
87
88                 ans = addTerm(ans, temp);
89             }
90         }
91     }
92 }
```

```
91         temp1 = temp1->next;
92     }
93
94     poly->temp2 = head2;
95
96     while(temp2 != NULL)
97     {
98         poly->temp = malloc(sizeof(struct polynomial));
99         temp->next = NULL;
100         temp->coeff = temp2->coeff;
101         temp->exp = temp2->exp;
102
103         ans = addTerm(ans, temp);
104
105         temp2 = temp2->next;
106     }
107
108     return ans;
109
110 }
```



Terminal



Test cases