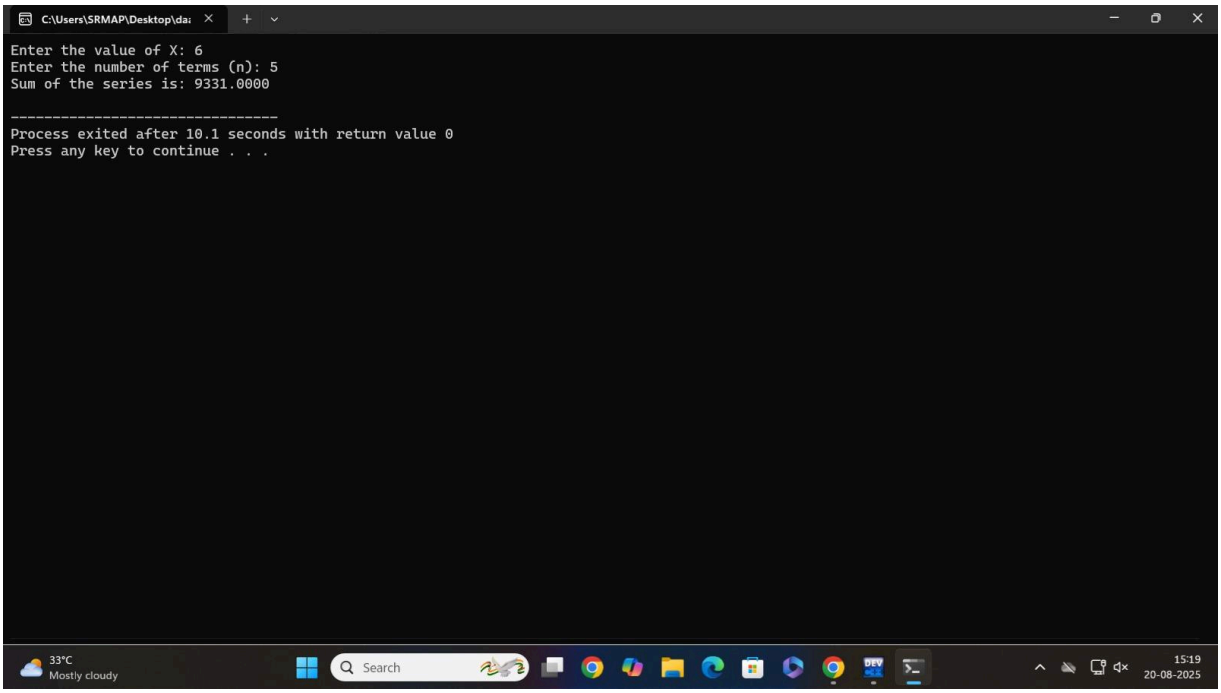
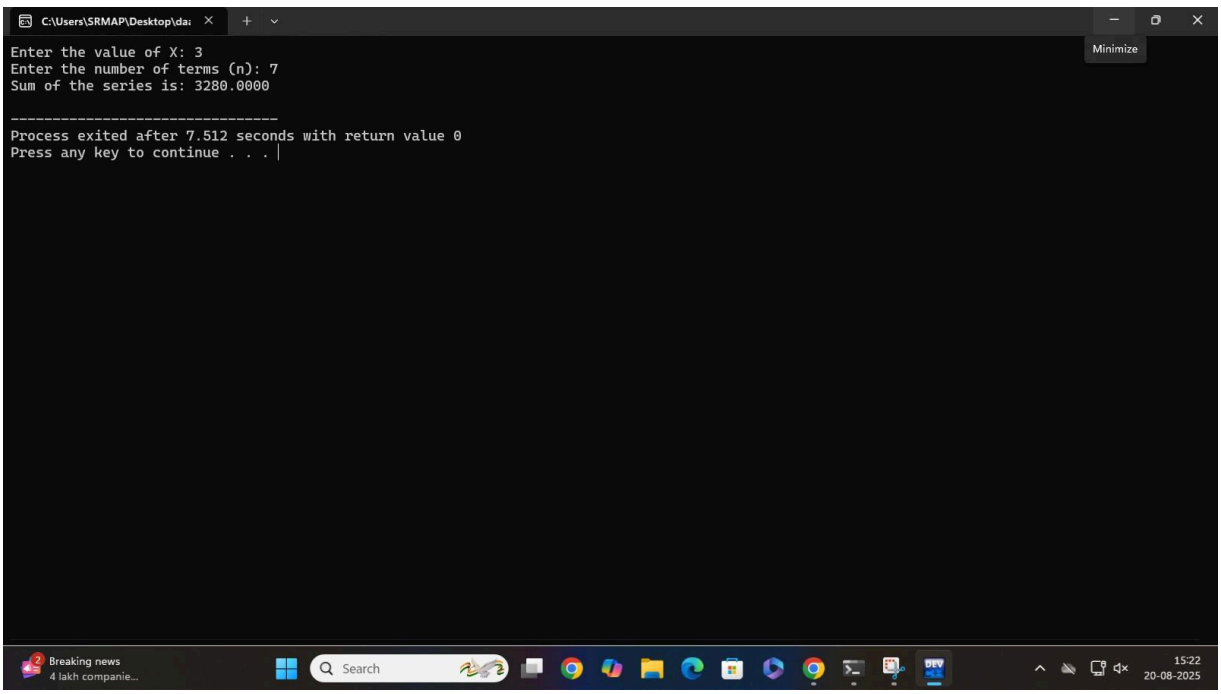
```
#include <stdio.h>

int main() {
    int n, i, j;
    float x, sum = 0.0, term;

    printf("Enter the value of X: ");
    scanf("%f", &x);
    printf("Enter the number of terms (n): ");
    scanf("%d", &n);

    for (i = 0; i <= n; i++) {
        term = 1.0;
        // Calculate X^i
        for (j = 0; j < i; j++) {
            term *= x;
        }
        sum += term;
    }

    printf("Sum of the series is: %.4f\n", sum);

    return 0;
}
```




```
#include <stdio.h>
```

```
int main() {
    int n, i;
    float x, sum = 0.0, term = 1.0;

    printf("Enter the value of X: ");
    scanf("%f", &x);
    printf("Enter the number of terms (n): ");
    scanf("%d", &n);

    // First term is 1 (X^0)
    sum = 1.0;

    for (i = 1; i <= n; i++) {
        term *= x;  // Calculate the next term by multiplying the previous term by X
        sum += term;
    }

    printf("Sum of the series is: %.4f\n", sum);

    return 0;
}
```



```
#include <stdio.h>
#include <stdlib.h>

struct Node {
    int data;
    struct Node *left;
    struct Node *right;
};

struct Node* newNode(int data) {
    struct Node* node = (struct Node*) malloc(sizeof(struct Node));
    node->data = data;
    node->left = node->right = NULL;
    return node;
}

struct Node* insert(struct Node* root, int data) {
    if (root == NULL) return newNode(data);
    if (data < root->data)
        root->left = insert(root->left, data);
    else if (data > root->data)
        root->right = insert(root->right, data);
    return root;
}

struct Node* delNode(struct Node* root, int data) {
    if (root == NULL) return NULL;

    if (data < root->data)
        root->left = delNode(root->left, data);
    else if (data > root->data)
        root->right = delNode(root->right, data);
    else {
        // Node with only one child or no child
        if (root->left == NULL) {
            struct Node* temp = root->right;
            free(root);
            return temp;
        } else if (root->right == NULL) {
            struct Node* temp = root->left;
            free(root);
            return temp;
        }
        // Node with two children: inorder successor
```

```
        struct Node* temp = root->right;
        while (temp->left != NULL) {
            temp = temp->left;
        }
        root->data = temp->data;
        root->right = delNode(root->right, temp->data);
    }
    return root;
}

void inorder(struct Node* root) {
    if (root == NULL) return;
    inorder(root->left);
    printf("%d ", root->data);
    inorder(root->right);
}

int main() {
    struct Node* root = NULL;
    root = insert(root, 29);
    insert(root, 39);
    insert(root, 66);
    insert(root, 98);
    insert(root, 70);
    insert(root, 21);
    insert(root, 82);

    printf("elements before deletion: ");
    inorder(root);

    root = delNode(root, 82);
    root = delNode(root, 39);

    printf("\nelements after deletion: ");
    inorder(root);

    return 0;
}
```

C++ Online Compiler

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```c
#include <stdio.h>
#include <stdlib.h>

struct Node {
    int data;
    struct Node *left;
    struct Node*right;
};
struct Node* newNode(int data) {
    struct Node* node = (struct Node*) malloc(sizeof(struct Node));
    node->data = data;
    node->left = node->right = NULL;
    return node;
}
struct Node* insert(struct Node* root, int data) {
    if (root == NULL) return newNode(data);
    if (data < root->data)
        root->left = insert(root->left, data);
    else if (data > root->data)
        root->right = insert(root->right, data);
    return root;
}
struct Node* delNode(struct Node* root, int data) {
```

```
elements before deletion: 21 29 39 66 70 82 98
elements after deletion: 21 29 66 70 98
```