Dev-C++ 4.9.9.2

File Edit Search View Project Execute Debug Tools CVS Window Help

New Insert Toggle Goto

Project Classes Debug

[*] Day 01.c

```c
#include <stdio.h>

#define MAX_SIZE 100

int array[MAX_SIZE];
int size = 0;
void traverse() {
    printf("Array elements: ");
    for (int i = 0; i < size; i++) {
        printf("%d ", array[i]);
    }
    printf("\n");
}
int search(int key) {
    for (int i = 0; i < size; i++) {
        if (array[i] == key) {
            return i;
        }
    }
    return -1;
}

void insert(int element) {
    if (size < MAX_SIZE) {
        array[size] = element;
        size++;
        printf("Element inserted successfully.\n");
    } else {
        printf("Array is full. Cannot insert element.\n");
    }
}
void delete(int index) {
    if (index < 0 || index >= size) {
        printf("Invalid index. Deletion failed.\n");
    } else {
        for (int i = index; i < size - 1; i++) {
            array[i] = array[i + 1];
        }
```

Compiler Resources Compile Log Debug Find Results

6: 14 Modified Insert 74 Lines in file

Dev-C++ 4.9.9.2

File Edit Search View Project Execute Debug Tools CVS Window Help

New Insert Toggle Goto

Project Classes Debug

[*] Day 01.c

```
            array[i] = array[i + 1];
        }
        size--;
        printf("Element deleted successfully.\n");
    }
}
void update(int index, int newElement) {
    if (index < 0 || index >= size) {
        printf("Invalid index. Update failed.\n");
    } else {
        array[index] = newElement;
        printf("Element updated successfully.\n");
    }
}

int main() {
    insert(10);
    insert(20);
    insert(30);
    traverse();

    int searchKey = 20;
    int searchResult = search(searchKey);
    if (searchResult != -1) {
        printf("%d found at index %d.\n", searchKey, searchResult);
    } else {
        printf("%d not found in the array.\n", searchKey);
    }

    delete(1);
    traverse();

    update(0, 15);
    traverse();

    return 0;
}
```

Compiler Resources Compile Log Debug Find Results

6: 14 Modified Insert 74 Lines in file

Dev-C++ 4.9.9.2

File Edit Search View Project Execute Debug Tools CVS Window Help

New Insert Toggle Goto

Project Classes Debug

[*] Day 01.c

```c
#include <stdio.h>
unsigned long long factorial(int n);
unsigned long long factorial(int n) {
    if (n == 0 || n == 1) {
        return 1;
    } else {
        return n * factorial(n - 1);
    }
}
int main() {
    int num;
    printf("Enter a number to calculate its factorial: ");
    scanf("%d", &num);
    unsigned long long fact = factorial(num);
    printf("Factorial of %d is: %llu\n", num, fact);
    return 0;
}
```

Compiler Resources Compile Log Debug Find Results

15: 53 Modified Insert 18 Lines in file

Dev-C++ 4.9.9.2

File Edit Search View Project Execute Debug Tools CVS Window Help

New Insert Toggle Goto

Project Classes Debug

[*] Day 01.c

```c
#include <stdio.h>

void findDuplicates(int arr[], int size) {
    printf("Duplicate elements in the array are: ");
    for (int i = 0; i < size; i++) {
        for (int j = i + 1; j < size; j++) {
            if (arr[i] == arr[j]) {
                printf("%d ", arr[i]);
                break;
            }
        }
    }
}

int main() {
    int arr[] = {1, 2, 3, 4, 2, 7, 8, 8, 3};
    int size = sizeof(arr) / sizeof(arr[0]);

    findDuplicates(arr, size);

    return 0;
}
```

Compiler Resources Compile Log Debug Find Results

22: 2 Modified Insert 22 Lines in file

Dev-C++ 4.9.9.2

File Edit Search View Project Execute Debug Tools CVS Window Help

New Insert Toggle Goto

Project Classes Debug

[*] Day 01.c

```c
#include <stdio.h>

int main() {
    int arr[] = {10, 5, 8, 20, 2};
    int n = sizeof(arr) / sizeof(arr[0]);
    int max = arr[0];
    int min = arr[0];

    for (int i = 1; i < n; i++) {
        if (arr[i] > max) {
            max = arr[i];
        }
        if (arr[i] < min) {
            min = arr[i];
        }
    }

    printf("Maximum element in the array: %d\n", max);
    printf("Minimum element in the array: %d\n", min);

    return 0;
}
```

Compiler Resources Compile Log Debug Find Results

22: 2 Modified Insert 22 Lines in file

Dev-C++ 4.9.9.2

File Edit Search View Project Execute Debug Tools CVS Window Help

New Insert Toggle Goto

Project Classes Debug

[*] Day 01.c

```c
#include <stdio.h>

int fibonacci(int n) {
    if (n <= 1) {
        return n;
    }
    return fibonacci(n - 1) + fibonacci(n - 2);
}

int main() {
    int n = 10;
    int sum = 0;

    printf("Fibonacci series:\n");
    for (int i = 0; i < n; i++) {
        printf("%d, ", fibonacci(i));
        sum += fibonacci(i);
    }

    printf("\nSum: %d\n", sum);

    return 0;
}
```

Compiler Resources Compile Log Debug Find Results

13: 1 Modified Insert 23 Lines in file

Dev-C++ 4.9.9.2

File Edit Search View Project Execute Debug Tools CVS Window Help

New Insert Toggle Goto

Project Classes Debug

[*] quaestion 06 linear.c

```cpp
#include <iostream>
using namespace std;

int linearSearch(int arr[], int n, int x) {
    for (int i = 0; i < n; i++) {
        if (arr[i] == x) {
            return i + 1;
        }
        if (arr[i] > x) {
            break;
        }
    }
    return -1;
}

int main() {
    int arr[] = {1, 5, 6, 7, 9, 10};
    int n = sizeof(arr) / sizeof(arr[0]);
    int x = 6;

    int result = linearSearch(arr, n, x);
    if (result == -1) {
        cout << "Element not found" << endl;
    } else {
        cout << "Element found at location " << result << endl;
    }

    return 0;
}
```

Compiler Resources Compile Log Debug Find Results

29: 2 Modified Insert 30 Lines in file

Dev-C++ 4.9.9.2

File Edit Search View Project Execute Debug Tools CVS Window Help

New Insert Toggle Goto

Project Classes Debug

Day 01.cpp DSA DAY 01.c

```c
#include <stdio.h>

int binarySearch(int arr[], int size, int x) {
    int left = 0;
    int right = size - 1;
    while (left <= right) {
        int mid = left + (right - left) / 2;
        if (arr[mid] == x) {
            return mid;
        }
        else if (arr[mid] < x) {
            left = mid + 1;
        }
        else {
            right = mid - 1;
        }
    }
    return -1;
}

int main() {
    int arr[] = {1, 5, 6, 7, 9, 10};
    int x = 6;
    int size = sizeof(arr) / sizeof(arr[0]);
    int result = binarySearch(arr, size, x);

    if (result != -1) {
        printf("Element found at location %d\n", result);
    } else {
        printf("Element not found\n");
    }

    return 0;
}
```

34°C Mostly sunny

Search

12:39:18 24-07-2024