

STRUCTURES AND TYPEDEF RESEARCH

In C programming, "structures" and "typedef" are essential concepts for organizing and defining custom data types.

1. Structures:

- Definition: A structure is a user-defined data type in C that allows you to group different types of variables under a single name.

- Syntax:

```
```\n\nstruct structure_name {\n\n    // Member variables or fields\n\n    data_type1 member1;\n\n    data_type2 member2;\n\n    // ...\n\n};
```

### 2. Typedef:

- Definition: Typedef is used to create an alias or a new name for existing data types, including structures.

- Syntax:

```
```\n\ntypedef existing_data_type new_data_type;
```

In summary, structures provide a way to group related variables under a single user-defined data type, enhancing code organization. Typedef simplifies the process of creating custom data types, making code more readable and maintaining consistency. The combination of structures and typedef is powerful for creating complex and well-organized data structures in C programming.