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LAB REPORT

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SUBJECT: C PROGRAMMING

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Pointers in C- programming

Objective

To understand programming with pointer & Function call by reference

Theory.

A pointer in C-language is a variable which hold the address of another variable of same data type. Pointers are used to access memory & manipulate the content of that address.

Declaration of Pointer variables

Syntax.

Data - Type * Variable _ Names.

Initiallation of pointer variables.

Pointer initallization is the process of assigning address of a variable to a pointer variable. Pointer variable can only contains address of a variable of the same data type.

Example:

```
void main()
  {
    int a=6;
    int *6;
     P = &a;
  }
```

Dereference operater

The dereference operator or indirection operator, sometime denoted by '*' is unassy operator found in C-language it operators on the pointer variable, return value equivalent to the value at the pointer address. It is wed in these way.

- Declaration
- Derefence operator.

Bad pointer

A bad pointer is a pointer which contain a random address just like an uninitized int variable which starts out with a random int value.

Null pointer.

A null pointer is a pointer which point nothing. It is used to pass a null pointer to function argument when we don't wont to pass any valid memory address.

Function cell by reference.

To pass a value by reference, argument pointer are passed to function just like any other values so, accordingly we need to declare the function parameter as pointer type.

Example,

```
void swap (int *a, int *b).
{
  int c;
    c = *a;
    *a = *b;
    *b = c;
  return 0;
}.
```