

~~void main()~~

1.12.22

Pointer - A pointer is a derived data type. in C it is built from one of the fundamental data types available in C. Pointer contain memory address as their values.

∴ these addresses are the location in the computer memory where program instruction and data are stored.

* Types of data types

① Derived ② User defined ③ Primary

Write some features of pointers.

- ① Pointers are more efficient in handling array and data tables
- ② Pointers can be used to return multiple values from a function by a function argument.
- ③ Pointers allow C to support dynamic memory management.
- ④ Pointers increase the execution speed, reducing ~~and~~ the program ~~prog~~ execution time.
- ⑤

Declaration of a Pointer Variable

- ① A pointer variable can contain addresses that belong to a separate data types, they must be declared before using it

The given form of declaration is
datatype * pointer variable;

Ex int * xll;

- Q Difference between pointer variable and normal variable.

Q a = 10, b = 20, * ptr_a, * ptr_b;

void main ()

{
 int a = 10, b = 20, * ptr_a, * ptr_b;

 * ptr_a = &a;

 * ptr_b = &b;

 * ptr_a = * ptr_a + 20;

 * ptr_b = * ptr_b - 5;

 printf("a = %d \n b = %d",
 * ptr_a, * ptr_b);

 getch();

}

```

int
*
#include <stdio.h>
#include <conio.h>
void main()
{
    int a, b;
    int *p1, *p2;
    printf("\n Enter the values of a & b:");
    scanf("%d %d", &a, &b);
    p1 = &a;
    p2 = &b;
    *p1 = *p1 + 20;
    *p2 = *p2 + 5;
    printf("a = %d", *p1);
    printf("b = %d", *p2);
}

```

a = 20

b = 30

↓

a = 40

b = 35

To find greatest/maximum of two number using pointers

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

```
#include <conio.h>
```

```
void main()
```

```
{ int fno, sno, *ptr1 = &fno, *ptr2 = &sno;
```

```
printf("\n\n Pointer : Find the maximum  
number between two number : \n");
```

```
printf(" Input the first number : ");
```

```
scanf("%d", ptr1);
```

```
printf(" Input the second number : ");
```

```
scanf("%d", ptr2);
```

```
if (*ptr1 > *ptr2)
```

```
{ printf("\n\n %d is the maximum  
number - \n\n", *ptr1);
```

```
}
```

```
else
```

```
{
```

```
printf("\n\n %d is the maximum  
number - \n\n", *ptr2);
```

```
}
```

```
getch();
```

```
}
```

~~To find~~
Q. Write a C program to compute the sum of numbers stored in an Array.

```
#include <stdio.h>
#include <conio.h>
void main()
```

```
{ int A[10], i, sum;
```

```
  i = 0
```

```
  int *P;
```

```
  printf("Enter the values:");
```

```
  for (i = 0; i < 10; i++)
```

```
    scanf("%d", &A[i]);
```

```
  P = A; // Initialization of
```

```
  while (i < 10) pointer P
```

```
{
```

```
  for (i
```

```
    sum (sum + *P)
```

```
    p++;
```

```
    i++;
```

```
}
```

```
printf("The sum = %d", sum);
```

```
getch();
```

```
}
```


1.12.22

Q Write a memorandum to be issued within the office to stop electricity Misuse.

MEMORANDUM

Date: December 1, 2022

To:

All the employees of the office

From:

Mr/Mrs XYZ, Head of the office

Subject: To stop electricity misuse within the office

As you all well aware that electricity is the flow of electrical power or charge. Thus, for the misuse of electricity, the country suffers an acute shortage of power. There are frequent power cuts across the country for it. Mills and factories cannot run. The misuse of electricity slow down the production. Thus it is a strict order to all the employees of the office to stop misusing the electricity during office hours. If anyone found misusing electricity Rs, 1000/- have to pay as penalty.

Narration

① Direct
Indirect

② Direct

Indirect

Reporting verb

He said, "Rina is a good girl."
He said that Rina is a good girl.

He said, "I will tell you the truth."

He said that he would tell me the truth.

Simple Present - Simple Past
Present Continuous - Past continuous
Present Perfect - Past Perfect
Simple Past - Past Perfect.

said to - told

Reporting Speech