

DAY-2

```
# int main() // i = 0 + 0
{
    int i = 0, j; // j = 1
    clrscr();
    j = j++ + i;
    printf("%d \t %d", i, j);
    getch();
    return 0;
}
```

O/P 1 0

```
# int main()
{
    int i = 2, j = 3, k;
    clrscr();
    k = ++i + ++i + --i - i;
    printf("%d \t %d \t %d", i, j, k);
    getch();
    return 0;
}
```

Diagram illustrating variable changes and calculations:

- i : $2 \xrightarrow{++i} 3 \xrightarrow{++i} 4 \xrightarrow{--i} 3 \xrightarrow{-i} 2$
- j : $3 \xrightarrow{--j} 2 \xrightarrow{--j} 1$
- k : $3 + 3 + 3 - 3 - 1 + 1 = 6$

O/P & 2, 1, 6.

```
# int main ( )
{
    int i = 1;
    clrscr ( );
    if (i++)
    {
        printf ("%d", i);
    }
    getch ( );
    return 0;
}
```

O/P 2

```
# int main ( )
{
    int x = 1, y = 2, z = 3;
    switch (x)
    {
        case x :
            printf ("Hello")
        case y :
            printf ("Hi")
        case z :
            printf ("Bye");
    }
    getch ( );
    return 0;
}
```

Case ke aage
hamesha const

Switch case m logical operator use
or relational
nil he skta

Date _____

Page No. _____

Pointer

↳ "address of" operator
↳ "indirection" operator.

↳ → variable name ke age likhne se
memory location btata

```
# int main()
```

```
{
```

```
    getch()
```

```
{
```

```
    clrscr() int x;
```

```
    getch() clrscr();
```

```
    printf("enter the value of x\n");
```

```
    scanf("%d", &x);
```

```
    printf("%d", &x);
```

```
    getch();
```

```
    return 0;
```

```
}
```

↳ stand unsigned

age. usko kta de
value store krni
hoga

```
# int main()
```

```
{
```

```
    int x = 5;
```

```
    clrscr();
```

```
    printf("%d %d", x, &x);
```

```
    getch();
```

```
    return 0;
```

```
}
```

$x = 5$ $\&x = 65524$ memory
location $\&\&x = 5$ memory location
value kya hai
or

in short value of

~~instruction~~ if you put me before address★ Pointer is special variable: it holds address
of a variable

& variable name :- address of a variable

datatype variable name ; int x ; x = 5 ;

datatype variable name = value ; int x = 5 ;

data type a pointer name ;

data type * pointer name = address of variable ;

int * iptr ;	} declaration .
float * fptr ;	
double * dptr ;	
char * cptr ;	

✓ (int * iptr = &x)


```
# int main ()
{
    int x = 5
    clrscr ()
    int *iptr = &x
    clrscr ()
    printf (" %d & %d\n", *iptr, *iptr );
    getch ();
}
```

O/P 5 5 5

$\&x = \text{iptr}$

x = 5
 $\&x = 5$
 $\&\text{iptr} = 5$
 address of x

```
# int main ()
{
    int x = 5
    int *iptr = &x;
    clrscr ()
    printf (" %d %d %d %d %d ", x, &x,
            *iptr, &*iptr, *&*iptr );
    getch ();
    return 0;
}
```

O/P 5 5 5 5 5

```
// ** & ipte  
x * ipte = x
```

Pointer to pointer or Double pointer

```
int **dptr
```

```
# int main  
{  
    int x = 6;  
    int *ptr  
    ptr = &x;  
    int **dptr = &ptr;  
    clrscr();  
    printf("%d", **dptr);  
    getch();  
    return 0;  
}
```

O/p 6.

```
# int main  
{  
    int x = 6, *iptr = &x;  
    char ch = 'a', *cptr = &ch;  
    float f = 5.5, *fptr = &f;  
    printf("%d %d %d", size of (iptr), size of  
           (cptr), size of (fptr));  
    getch();  
    return 0;
```


DID 555
Kisi b pointer ki address

```
printf ("%u\t%u", iptr, cptr);  
iptr++;  
cptr++;  
printf ("\n%u\t%u", iptr, cptr);
```

Cloud
Printed
option
Tetrahedron
3
Op 6


```
# int main
{
    int i = 1;
    clrscr();
    for (i; ++i < 10; ++i); // 3
    {
        printf("%d", ++i);
    }
    printf("\n %d", i);
    getch();
    return 0;
}
O/P      12      12
```

* While Loop

```
initialization
while (cond^n);
{
    ++/--
}
```

```
# int main
{
    int x = 1;
    while (++x <= 10) // 92
    {
        printf("%d", x);
    }
    getch();
    return 0;
}
O/P      2 8 10
O/P      11
```

```
# int main ()
{
    int count = 1;
    clrscr ();
    while (--count > 0);
    printf ("%d", count);
    getch ();
    return 0;
}
O/P = -1.
```

* Functions

- Fun declaration
main before main () void teekam ();
- Fun call
inside main teekam ();
- Fun defⁿ
after main void teekam () { }

void main teekam (); } If we do not
int main ()

```
{
    clrscr ();
    teekam ();
    printf ("Thank you \n");
    teekam ();
    printf ("all right");
    teekam ();
    getch ();
}
```

put this
then
→ this
define
up

```
void teekam ()
{
    printf ("jeece \n");
}
```

O/P

~~jeece~~
Thank You
all right & jeece
& all right jeece

* Based on return type & argument
4 types

- return value & no arg
- no return type & no arg
- return type & arg
- no return value & arg

0	0
0	1
1	0
1	1

```
# void sum (int x, int y)
{
    printf ("%d", x+y);
}
```

```
int main ()
```

```
{
```

```
    int a = 5, b = 6
```

```
    clrscr();
```

```
    sum (a, b);
```

```
    getch ();
```

```
}
```

O/P = 11

12

13

25.