PHP : PHP is stand for hypertext pre processor. It is open source
server side scripting language which used for developed dynamic
websites. It was developed by Rasmus Lerdrof around 1994.

Extension : .php

Advantage
*   open source(source code can change)
*   multiplatform(win,linux,mac)
*   support many databases (e.g mysql, oracle etc)
*   support many web servers (e.g. apache, iis etc)
*   easy to use, light weight, fast processing
*   support opps features

php
xampp (Cross)
wamp (windows)
lamp (linux)
mamp (mac)

xampp download from apachefriends.org
install

xampp control panel   (start apache and mysql)

save file
        c://xampp/htdocs/folder/filename.php
e.g.
        c://xampp/htdocs/06pm/first.php

code

Run   (browser)
http://localhost/06pm/first.php
or
localhost/06pm/first.php

Tags(Delimeters)

1 standard tag

```php
<?php

?>
```

2 short tag
```
<?

?>
```

3 Asp tag
```
<%

%>
```

for output on screen

echo
* fast processing
* it can execute multiple statement
e.g.
```
echo "","","";
echo "Hello","Ducat";
```

print
* slow processing
* it can execute only single statement
e.g.
```
print "";
print "Hello";
```

concatination (.)
```
echo    "Hello"."Ducat";
print   "Hello"."Ducat";
```

new line
```
<br> (webpage)
\n       (file)
```

```
echo "Hello <br> PHP";
print "Hello <br> PHP";
echo "<h1>India</h1>";
```

comments

```
        //              single line comments
        #               single line comments


        /*

                multiple line comments

        */
```

variable : it is a temporary memory location which used for hold the information. the value of variable can vry(change) at run time.

Rules for declare variable
* start from $ sign
* continue with a-zA-Z_
* can combination a-zA-Z0-9

e.g.
```
        $a;
        $D;
        $5;             wrong
        $_A;
        $a5;
        $5a;    wrong
```

```
$a = 5;
echo $a;


$b = "India";
echo $b;
```

Data Types : in php data types allocate automatically at run time according to variable value.

        int, string, double, array, object , resource, boolean, null

check data type

```
        gettype(var name)                 show only data type
        var_dump(var name)                print, show data type and
value

e.g.

        $a = 5;
        echo gettype($a);
        var_dump($a);




e.g

        $x = 5;
        echo "value of x is ".$x;


e.g.
        $a = 5;
        $b = 3;
        echo "value of a is ".$a." and value of b is ".$b;



e.g.

        $z = 8;

        echo "value of z = ".$z;              (value of z is 8)
        echo "value of z = $z";               (value of z is 8)
        echo 'value of z = $z';               (value of z is $z)
```

Constant : it is a temporary memory location which used for hold the
information. the value of constant can not vry(change) at run time.

```
        defined("constant name","value");
        const constantname = value;

        Rules for define constant name
                * always start from a-zA-Z_
                * can use a-zA-Z0-9

        e.g
                define("HOST","Localhost");
                or
                const HOST = "Localhost";

                echo HOST;
```

```
e.g.
        define("A","India");
        or
        const A = "India";

        echo A;
```

Operators : It is a special symbols which meanings are predefine. They work accoring to ther predefine meaning.

Type of Operators

1 Arithmetic Operator
```
        +       Addition
        -       Substraction
        *       Multiplication
        /       Division
        %       Modulus

        e.g.
        $a = 10;
        $b = 3;

        $c = $a+$b;             // output 13
        echo $c;

        $c = $a/$b;             // output 3

        $c = $a%$b;             // output 1
```

2 Assignment Operator
        It used for shift the value from right side to left side

```
        =
        +=
        -=
        *=
        /=
        %=

        e.g.

        $a = 5;
        $b = 2;

        $a = $a+$b
                or
        $a += $b;
```

```php
        $a = $a-$b;
        $a -= $b;
```

3 Comparision Operator

```
        ==              match only value
        ===             match value and data type
        !=              match only value
        !==             match value and data type
```

```php
        $a = 5;
        $b = "5";

        $a == $b;
        $a === $b;
```

4   Increment Operator

```
            ++      Increment By 1
            --      Decrement By 1
```

```php
        $a = 5;
        $a++;
        echo $a;        // Output 6


        $a = 5;
        ++$a;
        echo $a;        // Output 6


        $a = 5;
        echo $a++;      // Output 5
        echo $a;        // Output 6


        $a = 5;
        echo ++$a;      // Output 6
        echo $a;        // Output 6


        $a = 5;
        $a++;
        echo $a;        // Output 6
        echo --$a;      // Output 5
```

```
        echo $a;          // Output 5



5 Relational Operator

                >          Greater than
                >=         Greater than equal too
                <          Less than
                <=         Less than equal too


        e.g.
                $a = 5;
                $b = 5;

                $a >= $b;



6 Logical Operator

        &&      AND
        ||      OR
        !       NOT


        ($a>$b && $a>$c)   Both Condition True

        ($a>$b || $a>$c)   At Least One Condition True



7 Conditional Operator
  Ternary Operator
  Question Colon Operator

  syntax
        (condition ? "True Statement" : "False Statement")

  e.g.
        $a = 5;
        $b = 3;

        echo ($a>$b ? "A is Greater" : "B is Greater");





Conditional Statement
1 if
2 if else
3 if else if
4 switch case
```

Q wap to store a 3 digit number in a variable, check that number is palindrome or not ?

    $no = 134;

Q wap to store 3 digit number in a variable, check that is it armstrong or not ?

    $no = 153

Loop : Loop is used for execute same statement multiple times.

Types

1 for

    syntax

```
for(initialize; condtion; inc/dec)
{
        code
}
```

    e.g

```
for($i=1; $i<=5; $i++)
{
        echo "Hello";
}
```

    e.g

```
for($i=5; $i>=1; $i--)
{
        echo "Hello";
}
```

2 while

    syntax

```
            initialization;

            while(condition)
            {
                    code
                    inc/dec
            }


    e.g.

            $i=1;

            while($i<=5)
            {
                    echo "Hello";
                    $i++;
            }




3 do while

    syntax

            intitialization

            do
            {
                    code

                    inc/dec
            }while(condition)



            e.g.
```

Q Wap to print factorial of a given number.
        $no = 5;

Q. wap to print fibonacci series upto 10 numbers.
        0 1 1 2 3 5 8 ....

Q. wap to check that given number is palindrome or not.
        $no = 121;

Q. wap to check that given number is armstrong or not ?

```
        $no = 153;
```

Jump Statement
1 break
2 continue
3 exit