

NAME – ANSH GOEL

REGISTER NO. – 20BCE1798

COURSE NAME – INTERNET AND WEB PROGRAMMING

COURSE CODE – CSE3002

DATE – 27th September, 2022

LAB – 8

PHP BASICS

//Q1

Develop a simple program in PHP, to compute the yearly payment for the following: Initiate the loan amount of Rs.10000 with an interest of 10% per month in the program and compute the yearly payment. Display the result in a web page.

```
<!DOCTYPE html>
<html>
<body>

<?php
$P = 10000;
$R = 10;
$T = 1;

$SI = ($P * $T * $R) / 100;
$TA = ($SI + $P);

echo "Total amount = ". $TA

?>
</body>
</html>
```

OUTPUT:

Total amount = 11000

//Q2

Assume that a mathematician wants to automate an equation in-order to find out the value of the variable 'y' for the given equation. Being a programmer, to develop a program using PHP and find the value of 'y'.

```
<!DOCTYPE html>
<html>
<body>
<?php
$X = 20;
$Y;
$Y = ($X*2 -5);
echo "Value of Y = ". $Y
?>
</body>
</html>
```

OUTPUT:

Value of Y = 35

//Q3

Develop a PHP program to allot the branch the student opt in engineering stream based on the entrance exam marks they secured :

If mark>=90 Computer Science Engineering

>=80 mark <90 Mechanical Engineering

>=70 mark <80 Civil Engineering

else eligible for other engineering branches

```
<?php
$marks = readline("Enter marks: "); if($marks>=90){
echo "Computer Science ";
}
else if($marks>=80){ echo "Mechanical ";
}
else if($marks>=70){ echo "Civil";
}
else{
echo "Other Engineering";
}
?>
```

OUTPUT:

```
Enter marks obtained: 85  
Mechanical Engineering
```

//Q4

Develop a PHP program to remove zeros from the given number and display the result in a web page. For example, if the number is 102005 then desired output is 15.

```
<?php  
$num = readline("Enter number: ");  
$t = $num;  
$m = 0;  
$c = 0;  
while($t != 0){  
    $d = $t%10; if($d != 0){  
        $m += $d*pow(10, $c);  
        $c++;  
    }  
    $t /= 10;  
}  
  
echo $m;  
?>
```

OUTPUT:

```
Enter number: 50040506  
5456
```

//Q5

Given a four digit number 'x', to check whether 'x' is divisible by the sum of the digits of 'x'. A number 'x' is said to be divisible by 'y', if the remainder is zero when 'x' divides 'y'. Develop a PHP program using do...while loop. For example, the number 'x' is 1234 is not divisible by 10, because if we divide '1234' with the sum of its individual digits ($1+2+3+4 = 10$), then the remainder is not zero.

```
<?php
$n = readline("Enter a number: ");
$t = $n;
$d = 0;
while($t != 0){
    $d += $t%10;
    $t /= 10;
}

if($n % $d == 0) echo "Divisible";
else
echo "Not Divisible";
?>
```

OUTPUT:

```
Enter a number: 5435
Not Divisible
```

//Q6

A sequence generator generates number from 1. The new number generated is equal to sum of number previously generated and index of the number generated. That is for nth number, n is the index and it is equal to (n-1)th number in sequence + n. 1,1+2, 3+3, 6+4, 10+5, 15 + 6, Develop a php program to determine the nth number that will be generated by the sequence generator. Use do while loop in php.

```
<?php
$n = readline("Enter a number: ");
$c = 1;
$s = 0; do{
    $s += $c;
    $c++;
}while($c<=$n);

echo $n."th number = $s";
?>
```

OUTPUT:

```
Enter a number: 7
7th number = 28
```

//Q7

Develop a simple PHP program using for loop to print the integers from 1 to 1000 omitting those integers which are divisible by 7

```
<html>
<head></head>
<body>
<?php
for($i=0; $i<=1000; $i++){ if($i%7 != 0)
echo "$i<br>";
}
?>

</body>
</html>
```

OUTPUT:

```
1
2
3
4
5
6
8
9
10
11
12
13
15
16
17
18
19
20
22
23
24
25
26
27
29
30
31
32
33
34
36
37
38
39
40
41
43
44
45
46
47
48
50
51
52
53
54
55
57
58
59
60
61
62
64
65
66
67
68
69
71
73
74
75
76
78
79
80
81
83
83
85
86
87
88
89
90
92
93
94
95
96
97
99
100
101
102
103
104
106
107
108
109
```

```
//Q8
```

Assume that you are sending the 4 digit ATM PIN to your friend through email. For security purpose, you are encrypting the PIN and sending it. Develop the program in PHP using while loop to inculcate the following steps for the encryption process :

(a).Reverse the 4 digit PIN.

(b).In the reversed PIN, add 7 to each digit.

(c).Replace each digit with remainder value after dividing by 10. (d). Swap the first digit with the third digit.

(e).Swap the second digit with the fourth. Then print the encrypted integer.

For example Input(Actual PIN): 4567, then the output (Encrypted PIN): 2143

(Note: Initiate the input as 4567 in the program)

```
<?php
```

```
$n = readline("Enter PIN: ");
```

```
$t = $n;
```

```
$s = 0;
```

```
$e; while($t>0){
```

```

$d = (($t % 10)+7)%10;
$s = $s*10 + $d;
$t = floor($t/10);
}
$e = floor(($s%100)/10)*1000 + ($s%10)*100 + floor($s/1000)*10 +
floor(($s%1000)/100);
echo "Encrypted PIN = $e";
?>

```

OUTPUT:

```

Enter PIN: 7479
Encrypted PIN = 1464

```

//Q9
 'Z' is to be computed as a function of 'x' and 'y' according to $z=3x^2+2y^3-25.5$. Compute the values of z as x varies from -1.5 to 1.5 increments of 0.5 and y varies from 0 to 3 in steps of 1. Develop a PHP program to compute 'z' for all pairs of (x,y).

```

<html>
<head></head>
<body>
<?php
$x;
$y;
$z;
for($x=-1.5; $x<=1.5; $x+=0.5){ for($y=0; $y<=3; $y++){
$z = 3*pow($x,2) + 2*pow($y,3) - 25.5; echo "z($x,$y) = $z<br>";
}
}

```



```

}
?>

</body>
</html>

```

OUTPUT:

```

: z(-1.5,0) = -18.75
z(-1.5,1) = -16.75
z(-1.5,2) = -2.75
z(-1.5,3) = 35.25
z(-1,0) = -22.5
z(-1,1) = -20.5
z(-1,2) = -6.5
z(-1,3) = 31.5
z(-0.5,0) = -24.75
z(-0.5,1) = -22.75
z(-0.5,2) = -8.75
z(-0.5,3) = 29.25
z(0,0) = -25.5
z(0,1) = -23.5
z(0,2) = -9.5
z(0,3) = 28.5
z(0.5,0) = -24.75
z(0.5,1) = -22.75
z(0.5,2) = -8.75
z(0.5,3) = 29.25
z(1,0) = -22.5
z(1,1) = -20.5
z(1,2) = -6.5
z(1,3) = 31.5
z(1.5,0) = -18.75
z(1.5,1) = -16.75
z(1.5,2) = -2.75
z(1.5,3) = 35.25

```

```
//Q10
```

A city has a dam of capacity 'x' litres, water comes to the dam from 'n' places. Given the value of 'n' and the quantity of water (in litres and millilitres) that comes from 'n' places, Write a PHP code to determine the total amount of water in the dam. Assume that the total quantity of water in the dam, will be always less than the capacity of the dam. For example, if there are three places from which water comes to the dam and the water from place 1 is 2 litres 500 ml, water from second place is 3 litres 400 ml and water from third place is 1 litre 700 ml then the total quantity of water in dam will be 7 litres 600 ml.

```

<?php
$N = readline("Enter number of places: ");
$l = array();
$ml = array();

```

```

$sl = $sml = 0; for($i=0; $i<$n; $i++){
$j = $i+1;
$l[$i] = readline("Enter quantity of water(L) from place $j: ");
$mL[$i] = readline("Enter quantity of water(mL) from place $j: ");
$sl += $l[$i];
$sml += $mL[$i];
}
$sl += floor($sml/1000);
$sml = $sml%1000;
echo "Total quntity of water in tank = ".$sl."L ".$sml."mL";
?>

```

```

Enter number of places: 5
Enter quantity of water(L) from place 1: 50
Enter quantity of water(mL) from place 1: 10
Enter quantity of water(L) from place 2: 20
Enter quantity of water(mL) from place 2: 10
Enter quantity of water(L) from place 3: 30
Enter quantity of water(mL) from place 3: 10
Enter quantity of water(L) from place 4: 40
Enter quantity of water(mL) from place 4: 10
Enter quantity of water(L) from place 5: 60
Enter quantity of water(mL) from place 5: 10
Total quntity of water in tank = 200L 50mL

```