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**JURUSAN TEKNIK**

**FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM**

**UNIVERSITAS NEGERI PAPUA**

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**DIBUAT OLEH:**

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**NIM : 2013-65-027**

**PRODI : TEKNIK INFORMATIKA S1**

**KODE PROGRAM SOAL NOMOR 1. PROGRAM MENGHITUNG SELISIH WAKTU**

<?php

$jam1 = 3;

$menit1 = 40;

$detik1 = 50;

$jam2 = 9;

$menit2 = 0;

$detik2 = 20;

echo "|=====================================|<br>";

echo "|&nbsp&nbspPROGRAM MENGHITUNG SELISIH WAKTU&nbsp&nbsp|<br>";

echo "|=====================================|<br>";

echo "<br>";

echo "Agar mudah dalam penghitungan maka waktu jam pertama tidak boleh lebih dari waktu jam kedua agar hasil / selisihnya tidak bernilai negatif<br>";

echo "<br>";

echo "Diketahui kedua waktu sebagai berikut:<br>";

echo "Jam pertama: ".$jam1." jam ".$menit1. " menit ".$detik1." detik <br>";

echo "Jam kedua&nbsp;&nbsp;&nbsp;&nbsp;: ".$jam2." jam ".$menit2. " menit ".$detik2." detik <br>";

echo "<br>";

$jam = $jam2 - $jam1;

$menit = $menit2 - $menit1;

$detik = $detik2 - $detik1;

if ($jam1 > 24)

{echo "error!! batas jam hanya 24 jam saja<br>";}

else

if ($jam2 > 24)

{echo "error!! batas jam hanya 24 jam saja<br>";}

if ($menit1 > 60)

{echo "error!! batas menit hanya 60 menit saja<br>";}

else

if ($menit2 > 60)

{echo "error!! batas menit hanya 60 menit saja<br>";}

if ($detik1 > 60)

{echo "error!! batas detik hanya 60 detik saja<br>";}

else

if ($detik2 > 60)

{echo "error!! batas detik hanya 60 detik saja<br>";}

if ($jam < 0)

{echo "selisih error!! selisih jam tidak boleh bernilai negatif<br>";}

else

if (($detik < 0) and ($jam <= 0) and ($detik <= 0))

{echo "selisih error!! selisih jam tidak boleh bernilai negatif";}

else

if (($menit < 0) and ($jam <= 0) and ($detik <= 0))

{echo "selisih error!! selisih jam tidak boleh bernilai negatif";}

else

{

if ($menit < 0)

{

$menit = 60 + $menit2 - $menit1;

$jam = $jam-1;

}

if ($detik < 0)

{

$detik = 60 + $detik2 - $detik1;

$menit = $menit-1;

}

echo "Selisihnya adalah :<br>";

echo $jam." jam ".$menit." menit ".$detik." detik";

}

echo "<br>";

echo "<br>";

echo "|===================|<br>";

echo "|&nbsp&nbsp&nbsp&nbspCREATED BY BUDI&nbsp&nbsp&nbsp&nbsp|<br>";

echo "|===================|<br>";

?>

**KODE PROGRAM SOAL NOMOR 2. PROGRAM MENAMPILKAN POLA PERTAMA**

Tinggal diganti angkanya 3 untuk pola

yang berikutnya

<?php

$nilai = 5;

$text = "<b>#&nbsp</b>";

$space = "<b>&nbsp&nbsp&nbsp</b>";

echo "|=============================|<br>";

echo "|&nbsp&nbspPROGRAM MENAMPILKAN POLA&nbsp&nbsp|<br>";

echo "|=============================|<br>";

echo "<br>";

echo "Nilai = ".$nilai."<br><br>";

for ($a = 1; $a <= $nilai; $a++)

{

echo $text;

}

for ($a = 1; $a <= $nilai-2; $a++)

{

echo $space;

}

echo $text;

echo "<br>";

for ($a = 1; $a <= $nilai-2; $a++)

{

for ($b = 1; $b <= $nilai-1; $b++)

{

echo $space;

}

echo $text;

for ($b = 1; $b <= $nilai-2; $b++)

{

echo $space;

}

echo $text;

echo "<br>";

}

for ($a = 1; $a <= $nilai; $a++)

{

echo $text;

}

for ($a = 1; $a <= $nilai-1; $a++)

{

echo $text;

}

echo "<br>";

for ($a = 1; $a <= $nilai-2; $a++)

{

echo $text;

for ($b = 1; $b <= $nilai-2; $b++)

{

echo $space;

}

echo $text;

for ($b = 1; $b <= $nilai-1; $b++)

{

echo $space;

}

echo "<br>";

}

echo $text;

for ($a = 1; $a <= $nilai-2; $a++)

{

echo $space;

}

for ($a = 1; $a <= $nilai; $a++)

{

echo $text;

}

echo "<br>";

echo "<br>";

echo "|===================|<br>";

echo "|&nbsp&nbsp&nbsp&nbspCREATED BY BUDI&nbsp&nbsp&nbsp&nbsp|<br>";

echo "|===================|<br>";

?>

**KODE PROGRAM SOAL NOMOR 3. PROGRAM MENAMPILKAN DERET BILANGAN PRIMA 1 - 100**

<?php

echo "|===================================================|<br>";

echo "|&nbsp&nbspPROGRAM MENAMPILKAN DERET BILANGAN PRIMA 1 - 100&nbsp|<br>";

echo "|===================================================|<br>";

echo "<br>";

for($i=1;$i<=100;$i++)

{

$a = 0;

for($j=1;$j<=$i;$j++)

{

$k = $i % $j;

if($k == 0)

{

$a++;

}

}

if($a <= 2)

{

echo $i."&nbsp&nbsp";

}

}

echo "<br>";

echo "<br>";

echo "|===================|<br>";

echo "|&nbsp&nbsp&nbsp&nbspCREATED BY BUDI&nbsp&nbsp&nbsp&nbsp|<br>";

echo "|===================|<br>";

?>

**KODE PROGRAM SOAL NOMOR 4. PROGRAM MENAMPILKAN DERET BILANGAN FIBONACCI 1 - 100**

<?php

echo "|=======================================================|<br>";

echo "|&nbsp&nbspPROGRAM MENAMPILKAN DERET BILANGAN FIBONACCI 1 - 100&nbsp|<br>";

echo "|=======================================================|<br>";

echo "<br>";

$a = 1;

$b = 1;

$c = 0;

echo $a."&nbsp";

echo $b."&nbsp";

for($i=1;$i<=100;$i++)

{

$c = $a + $b;

if ($c < 100)

echo $c."&nbsp";

else

break;

$a = $b;

$b = $c;

}

echo "<br>";

echo "<br>";

echo "|===================|<br>";

echo "|&nbsp&nbsp&nbsp&nbspCREATED BY BUDI&nbsp&nbsp&nbsp&nbsp|<br>";

echo "|===================|<br>";

?>

**KODE PROGRAM SOAL NOMOR 5. PROGRAM MENGHITUNG FAKTORIAL DARI SUATU BILANGAN**

<?php

$a = 1;

$nilai = 7;

$text = "<b>#&nbsp";

echo "|=====================================================|<br>";

echo "|&nbsp&nbspPROGRAM MENGHITUNG FAKTORIAL DARI SUATU BILANGAN&nbsp|<br>";

echo "|=====================================================|<br>";

echo "<br>";

for ($i = 1; $i <= $nilai; $i++)

{$a = $a \* $i;}

echo "Faktorial dari angka ".$nilai." adalah = ".$a;

echo "<br>";

echo "<br>";

echo "|===================|<br>";

echo "|&nbsp&nbsp&nbsp&nbspCREATED BY BUDI&nbsp&nbsp&nbsp&nbsp|<br>";

echo "|===================|<br>";

?>

**KODE PROGRAM SOAL NOMOR 6. PROGRAM MENGURUTKAN DATA SECARA MENAIK**

<?php

$bil1= 3;

$bil2= 1;

$bil3= 8;

echo "|============================================|<br>";

echo "|&nbsp&nbspPROGRAM MENGURUTKAN DATA SECARA MENAIK&nbsp|<br>";

echo "|============================================|<br>";

echo "<br>";

echo "diketahui 3 bilangan yang belum urut<br>";

$data = array("$bil1", "$bil2", "$bil3");

print\_r($data);echo "<br><br>";

echo "dan setelah diurutkan<br>";

sort($data);

print\_r($data);

echo "<br>";

echo "<br>";

echo "|===================|<br>";

echo "|&nbsp&nbsp&nbsp&nbspCREATED BY BUDI&nbsp&nbsp&nbsp&nbsp|<br>";

echo "|===================|<br>";

?>

**KODE PROGRAM SOAL NOMOR 7. PPROGRAM MENGKONVERSI CELCIUS KE REAMUR, KELVIN, DAN FAHRENHEIT**

<?php

$celcius = 50;

echo "|===================================================================|<br>";

echo "|&nbsp&nbspPROGRAM MENGKONVERSI CELCIUS KE REAMUR, KELVIN, DAN FAHRENHEIT&nbsp|<br>";

echo "|===================================================================|<br>";

echo "<br>";

echo "KONVERSI CELSIUS KE REAMUR <br>";

echo "celcius : $celcius <br>";

echo "rumus : $celcius \* 4/5 <br>";

$reamur = $celcius \* 4/5;

echo "Reamur = $reamur<br>";

echo "<br>";

echo "KONVERSI CELSIUS KE KELVIN <br>";

echo "celcius : $celcius <br>";

echo "rumus : $celcius + 273.15 <br>";

$kelvin = $celcius + 273.15;

echo "Kelvin = $kelvin<br>";

echo "<br>";

echo "KONVERSI CELSIUS KE FAHRENHEIT <br>";

echo "celcius : $celcius <br>";

echo "rumus : $celcius \* 1.8 + 32 <br>";

$fahrenheit = $celcius \* 1.8 + 32;

echo "fahrenheit = $fahrenheit<br>";

echo "<br>";

echo "|===================|<br>";

echo "|&nbsp&nbsp&nbsp&nbspCREATED BY BUDI&nbsp&nbsp&nbsp&nbsp|<br>";

echo "|===================|<br>";

?>

**KODE PROGRAM SOAL NOMOR 8. PROGRAM MENAMPILKAN POLA KEDUA**

<?php

Tinggal diganti angkanya 3 untuk pola

yang berikutnya

$id = 0;

$nilai = 5;

$text = "<b>#&nbsp</b>";

echo "|===================================|<br>";

echo "|&nbsp&nbspPROGRAM MENAMPILKAN POLA KEDUA&nbsp|<br>";

echo "|===================================|<br>";

echo "<br>";

echo "Nilai = ".$nilai."<br><br>";

for ($a = 1; $a <= $nilai; $a++)

{$id = $id+1;

for ($i = 1; $i <= $id; $i++)

{

echo $text;

}

echo"<br>";

}

echo "<br>";

echo "|===================|<br>";

echo "|&nbsp&nbsp&nbsp&nbspCREATED BY BUDI&nbsp&nbsp&nbsp&nbsp|<br>";

echo "|===================|<br>";

?>

**KODE PROGRAM SOAL NOMOR 9. PROGRAM MENCARI FPB DARI DUA BILANGAN**

<?php

$nilai = 15;

$nilai2 = 10;

echo "|=========================================|<br>";

echo "|&nbsp&nbspPROGRAM MENCARI FPB DARI DUA BILANGAN&nbsp|<br>";

echo "|=========================================|<br>";

echo "<br>";

echo "Bilangan pertama = ".$nilai."<br>";

echo "Bilangan kedua = ".$nilai2."<br>";

echo "<br>";

for ($i = $nilai; $i >= 1; $i--)

{

for ($a = $nilai2; $a >= 1; $a--)

{

$hasil = $nilai / $i;

$hasil2 = $nilai2 / $a;

if ($hasil == $hasil2)

$FPB = $hasil;

}

}

echo "FPB dari bilangan ".$nilai." dan ".$nilai2." adalah = ".$FPB;

echo "<br>";

echo "<br>";

echo "|===================|<br>";

echo "|&nbsp&nbsp&nbsp&nbspCREATED BY BUDI&nbsp&nbsp&nbsp&nbsp|<br>";

echo "|===================|<br>";

?>