Assignment - 3

Na
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Cour
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Date

TASK-1

```
out.println ("Please enter a mark");
int mark = sc.nextInt();

if (mark > 50){
    out.println ("Pass");
}
else {
    out.println ("You shall not pass");
}
```

TASK-2

```
out.println ("Please enter a mark");
int mark = sc.nextInt ();

if (mark > 100) {
    out.print ("Wrong Input");
}
else if (mark >= 90) {
    out.print ("A");
}
else if (mark >= 80) {
    out.print ("B");
}
else if (mark >= 70) {
    out.print ("C");
}
else if (mark >= 60) {
    out.print ("D");
}
else if (mark >= 50) {
    out.print ("E");
}
else if (mark >= 0) {
    out.print ("F");
}
else {
    out.print ("Wrong Input");
}
```

TASK-3

```
out.println ("Please enter a length");
int length = sc.nextInt();
out.println ("Please enter a width");
int width = sc.nextInt();
int area;
area = length * width;
out.println ("area: " + area);
```

TASK-4

```
out.print ("Please enter a payment");
int payment = sc.nextInt();
out.print ("Please enter an age");
int age = sc.nextInt();
int tax;
if (age < 18) {
    out.print ("No Tax");
}
else {
    if (payment < 10000) {
        out.print ("No Tax");
    }
    else {
        if (payment > 20000) {
            tax = payment / 10;
        }
        else {
            tax = payment / 20;
        }
        out.print (tax);
    }
}
```

TASK-5

```
out.print ("please enter number of seconds");
int seconds = sc.nextInt();
int hour, minute;

hour = seconds / 3600;
seconds = seconds % 3600;
minute = seconds / 60;
seconds = seconds % 60;

out.println ("hour: "+ hour + "min: " +minute +
"seconds:      " + seconds);
```

divisor

since Int, so whole no. i.e. either 2 hour

Store remainder

TASK-6

```
out.print ("please enter a value for S");
int S = sc.nextInt();
int L;
if (S >= 100){
    L = 12000 / (4 + (S*S*14900));
}
else {
    L = 3000 - (125 * S * S);
}
out.print ("L:  " + L);
```

TASK-7

```
out.print ("Please enter the length of a side");
int x = sc.nextInt();
out.print ("Please enter the length of another side");
int y = sc.nextInt();
out.print ("Please enter the length of another side");
int z = sc.nextInt();
int S;
double area;

S = (x + y + z) / 2;
area = Math.sqrt (S * (S-x) * (S-y) * (S-z));
out.print ("area: " + area);
```

TASK-8

```
out.print ("Please enter the number of published articles");
Int num = sc.nextInt();
int total_fees = num * 500;
out.print ("Fees: " + total_fees);
```

TASK-9

```
out.print ("Please enter a num1");
int num1 = sc.nextInt();
out.print ("Please enter a num2");
int num2 = sc.nextInt();
out.print ("Please enter a num3");
int num3 = sc.nextInt();

if (num1 > num2) {
    if (num1 > num3) {
        out.print (num1);
    }
    else {
        out.print (num3);
    }
}
else {
    if (num2 > num3) {
        out.print (num2);
    }
    else {
        out.print (num3);
    }
}
```

TASK-10

```
out.print ("Please enter the name of your favourite car");
String car = sc.next();
for (int counter = 0; counter < 4; counter++){
        out.println(car);
}
```

TASK-11

```
out.print ("Please enter a value for a");
int a = sc.nextInt();
out.print ("Please enter a value for b");
int b = sc.nextInt();
int temp;

temp = a;
a = b;
b = temp;
out.print ("a = " + a);
out.print ("b = " + b);
```

TASK-12

```
out.print ("Please enter a value for a");
int a = sc.nextInt();
out.print ("Please enter a value for b");
int b = sc.nextInt();
out.print ("Please enter a value for c");
int c = sc.nextInt();
int temp;

temp = b;
b = a;
a = c;
c = temp;
out.print ("a= "+a + "b = "+b + "c = "+c);
```

TASK-13

```
out.print ("Please enter a value for a");
int a = sc.nextInt();
out.print ("Please enter a value for b");
int b = sc.nextInt();
out.print ("Please enter a value for c");
int c = sc.nextInt();
out.print ("Please enter a value for d");
int d = sc.nextInt();
int temp;

temp = c;
c = d;
d = a;
a = b;
b = temp;
out.print ("a= "+a + "b= "+b + "c = "+c + "d= "+d);
```

TASK-14

```
out.print ("Please enter a number");
int number = sc.nextInt();
if (number <0) {
        number = number * (-1);
}
else {
}
out.print (number);
```

TASK-15

Subhi

```
out.print ("Please enter time");
Int time = sc.nextInt();
if (time > 23) {
    out.print ("Wrong Input");
}
else if (time > 20) {
    out.print ("Patience is a virtue");
}
else if (time >= 19) {
    out.print ("Dinner");
}
else if (time > 17) {
    out.print ("Patience is a virtue");
}
else if (time >= 16) {
    out.print ("Snacks");
}
else if (time > 13) {
    out.print ("Patience is a virtue");
}
else if (time >= 12) {
    out.print ("lunch");
}
else if (time > 6) {
    out.print ("Patience is a virtue");
}
else if (time >= 4) {
    out.print ("Breakfast");
}
else if (time >= 0) {
    out.print ("Patience is a virtue");
}
else {
    out.print ("Wrong Input");
}
```

Assignment - 4

Course: CSE 110 Sec: 05
ID: 17201116
Assignment: 4
Date: 5th Nov, 2017

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TASK-01

```
out.println ("Please enter the name of your favourite car");
String name = sc.next ();
out.println ("Please enter a number");
int num = sc.nextInt ();
for (int c=1 ; c<= num ; c++){
    out.println (name);
}
```

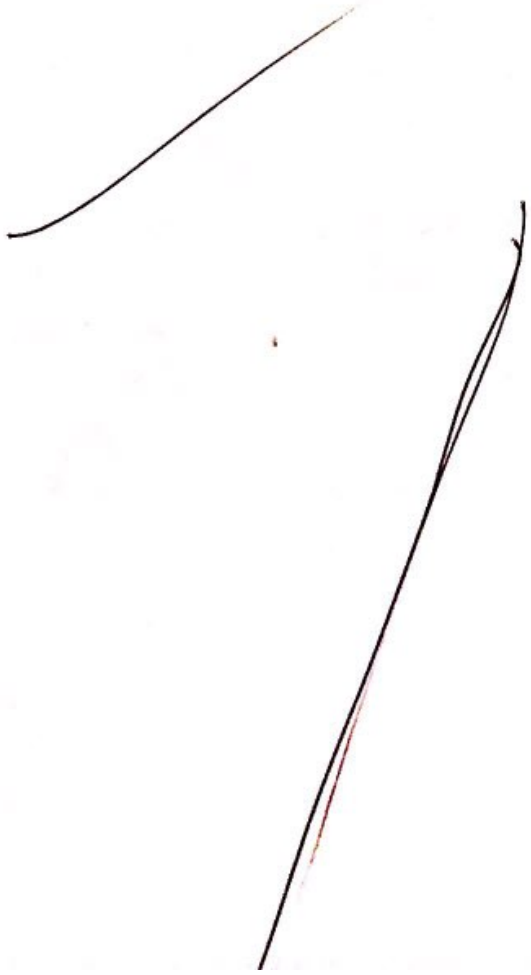
TASK-02

```
for (int n=10; n <=50 ; n++){
    if (n %2 == 1) {
        out.println (n);
    }
    else {
    }
}
```

No need

TASK – 03

```
out.println ("Please enter a number");
int x = sc.nextInt();
int max = x;
double sum = x;
for (int c = 1; c <= 20; c++){
        out.println ("Please enter another number");
        int y = sc.nextInt();
        sum+ = y;
        if (y > max){
            max = y;
        }
        else {
        }
out.println ("Max: " +max + "  " + "Avg: " + (sum/20))
}
```



TASK-04

```
int num, min;
double avg;
int sum = 0;
out.println ("Please enter a number");
num = sc.nextInt();
min = num;
int even = 0;
if (num % 2 == 0){
    even++;
    sum = num; }
for (int i=1 ; i<=19 ; i++){
    out.println ("Please enter ansther number");
    num = sc.nextInt();
    if (num <min){
        min = num;
        if (num % 2 == 0){
            even++;
            sum += num; }
    }
    avg = sum/even;
    out.println ("Min: " + min);
    out.println ("Avg: " + avg);
}
}
```

it will replace previous number

TASK-05

```
out.println ("Please enter a value of N");
int n= sc.nextInt();
int sum =0;
for (int c=1; c<=n; c++) {
    sum = sum+ (c * c*c);
}
double y = Math.cbrt(sum);
out.println(y);
```

TASK-06

```
out.println ("Please enter a value for N");
Int n = sc.next Int();
int y=0, sign=1;
for (int c=1; c<=n; c++) {
    y = y+ (sign * c *c);
    sign = sign *(-1);
}
out.print ln(y);
```

TASK - 07

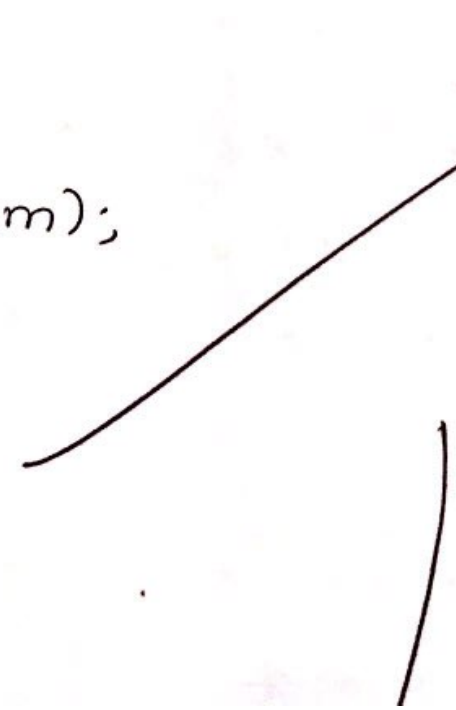
```
int sum=0;
for (int x=0; x <= 600 ; x++) {
    if (x%7==0){
        if (x % 9==0) {
        sum+ =x;
    }
    }
    else {
    }
}
out.println (sum);
```

TASK - 08

```
int sum=0;
for (int x=0 ; x <= 600; x++ ) {
    if (x%7 == 0){
        sum+=x;
    }
    else {
        if (x%9==0) {
        sum +=x;
        }
    }
}
out.print ("sum: "+sum);
```

TASK-09

```
int sum=0;
for (int x=0; x<=600; x++) {
    if (x%7==0) {
        if (x%9==0) {
        }
        else {
            sum+=x;
        }
    }
    else {
        if (x%9==0) {
            sum+=x;
        }
        else {
        }
    }
}
out.print (sum);
```



TASK-10

```
int sum = 0, OddCount = 0;
for (int c=1; c <= 10; c++) {
    out.println ("Please enter a no.");
    int x = sc.nextInt ();
    if (x %.2 == 1) {
        sum+ = x;
        OddCount ++;
    }
    else {
    }
}
double avg = sum / OddCount;
out.print ("sum: " +sum+ "  " + "avg: " +avg);
```

TASK-11

```
int sum=0, evenCount=0;
for (int c=1; c<=10; c++) {
    out.println ("Please enter a no.");
    int x = sc.nextInt();
    if (x%.2 == 0) {
        sum+=x;
        evenCount ++;
    }
    else {
    }
}
double avg = sum /evenCount;
out.print ("sum: "+sum+ "  " + "avg: "+avg);
```

No need

TASK-12

```
int sum=0, xCount=0;
for (int c=1; c<=10; c++) {
    out.println("Please enter a no.");
    int x = sc.nextInt();
    if (x%4==0){
        sum+=x;
        xCount++;
    }
    eles
    else{
    }
}
double avg = sum/xCount;
out.print("sum: "+sum+"  "+"avg: "+avg);
```

TASK-13

```
out.println("Please enter a number").
int num = sc.nextInt();
int sum = 0;
for (int x=1; x<=num; x++){
    if (x%2==0){
    }
    else{
        sum+=x;
    }
}
out.print("sum: "+sum);
```

TASK-14

```
out.println ("Please enter a number");
int n = sc.nextInt();
int product = 1;
for (int c=1; c<=n; c++){
        out.print ("Please enter a digit");
        int x = sc.nextInt();
        product = product * x;
}
out.print ("product: "+product);
```

TASK-15

```
out.println ("Please enter a number");
int n = sc.nextInt();
int sum = n;
out.print ("sum: "+sum);
for (int c=1; c<=20; c++){
        out.println ("Please enter another number");
        n = sc.nextInt();
        sum += n;
        out.print ("sum: "+sum);
}
```

?? print format

TASK -16

```
out.println ("Please enter a mark");
int mark = sc.nextInt();
int max= mark, min=mark, sum=mark;
for (int c=1; c<=10 ; c++){
      out.println ("Please enter another mark");
      mark = sc.nextInt();
      sum+ =mark;
      if (mark <min){
            min=mark;
      }
      else {
          if (mark> max){
              max=mark;
          }
         else {
         }
      }
}
double avg = sum/10;
out.println ("max:  "+max);
out.println ("min:  "+ min);
out.println ("avg:  " + avg);
```

TASK-17

```
int a=0, b=1, c= (a+b);
out.println (a);
out.println (b);
out.println (c);
while (c <= 1600) {
        a=b;
        b=c;
        c= a+b;
        out.println (c);
}
```

TASK 18

```
out.println ("Please enter a number");
int n= sc.nextInt();
int y=1;
for (int c=0; c <=y ; c++) {
        if (n/10==0) {
        }
        else {
                y++;
                n= n/10;
        }
}
out.println ("digits: " +y);
```

if n=981 ???

??

??

TASK - 19

```
out.print ("please give a number");
int x = sc.nextInt();

int p = 1;

for (int c = 1 ; c <= n; c++) {
    p = p * 10 ;
    }
out.print (p);
```

TASK - 20

```
out.print ("please give me a number");
Int n = sc.nextInt();
while (n > 0) {
    int r = n % 10;
    out.print (r);
    n = n / 10;
}
```

TASK-21

```
int num, temp, totalDigit, digit, product, count;
out.println ("Please enter a number");
num = sc.nextInt();
temp = num;
for (c=1; temp != 0; c++){
    temp = temp / 10;
}
totalDigit = count - 1;
product = 1;
for (c=1; c < totalDigit; c++){
    product *= 10;
}

for (c=1; product != 0; c++){
    digit = num / product;
    out.print (digit + " , ");
    num = num % product;
    product /= 10;
}
```

TASK 22

```
out.println ("Please enter a number between 0 and 9");
int num = k.nextInt();
if (num == 0) {
    out.println ("zero");
}
else if (num == 1) {
    out.println ("One");
}
else if (num == 2) {
    out.println ("Two");
}
else if (num == 3) {
    out.println ("Three");
}
else if (num == 4) {
    out.println ("Four");
}
else if (num == 5) {
    out.println ("Five");
}
else if (num == 6) {
    out.println ("Six");
}
else if (num == 7) {
    out.println ("Seven");
}
else if (num == 8) {
    out.println ("Eight");
}
else if (num == 9) {
    out.println ("Vine");
}
```

TASK - 23

```
Int num, temp, totalDigit, digit, product, count;
out.println ("Please enter a number");
num = scanner.nextInt();
temp = num;
for (count=1; temp != 0; count++) {
    temp = temp/10;
}
totalDigit = count-1;
product = 1;
for (count=1; count < totalDigit; count++){
    product *= 10;
}
for (count=1; product != 0; count++) {
    digit = num/product;
    if (digit == 0){
        out.print ("zero");
    }
    else if (digit == 1) {
        out.print ("One");
    }
    else if (digit == 2) {
        out.print ("Two");
    }
    else if (digit == 3) {
        out.print ("Three");
    }
    else if (digit == 4) {
        out.print ("Four");
    }
    else if (digit == 5) {
        out.print ("Five");
    }
    else if (digit == 6) {
        out.print ("Six");
    }
    else if (digit == 7) {
        out.print ("Seven");
    }
```

```
else if (digit == 8){
        out.print ("Eight ");
}
else if (digit == 9){
        out.print ("Nine ");
}
num = num % product;
product /= 10;
}
```

TASK - 24

```
out.println ("Please give me a number");
int x = sc.nextInt();

for (int c=1; c <= x ; c++) {
        out.print (c);
}
```

TASK-25

```
out.print ("Please give a number");
int n = sc.nextInt();
int y = 0;
for (int c=1; c<=n; c++){
    if (n/c == 0){
    y++;
    }
}
out.print(y);
```

TASK-26

```
out.print ("Please give number");
int num = sc.nextInt();
int x=0;
for (int c=1; c<=num; c++){
    if (num/c == 0){
        x++
    }
}
if (x=2){
    out.print ("Prime");
    }
    else {
    out.print ("Not prime");
    }
```

TASK - 27

```
for (int num = 1; num <= 1000; num++) {
    int factor = 0;
    for (int c = 1; c <= num; c++) {
        if (num % c == 0) {
            factor++;
        }
    }
    if (factor == 2) {
        out.println (num);
    }
}
```

TASK - 28

```
out.print ("Please give a number");
Int num = sc.nextInt();
double sum = 0;
for (int c=1; c <= num; c++) {
    if (num % c == 0) {
        sum += c;
    }
}
out.print (sum);
```

TASK - 29

```
int num, c, factorSum;
out.println("Please enter a number");

num = k.nextInt();
factorSum = 0;
for (c = 1; c < num; c++){
    if (num % count == 0) {
        factorSum += count;
    }
}
if (factorSum == num){
    out.println(num + " is a perfect number");
}
else {
    out.println(num + " is not a perfect number");
}
```

TASK-30

```
t.println ("Please enter the lowest value");
int valueL = sc.nextInt();
out.println ("Please enter the highest value");
int valueH = sc.nextInt();
int primeCount = 0;
int perfectCount = 0;
for (int num = valueL; num <= valueH; num++){
    int factor = 0;
    int factorSum = 0;
    for (int count = 1; count <= num; count++){
        if (num % count == 0){
            factor++;
            if (count != num){
                factorSum += count;
            }
        }
    }
    if (factor == 2){
        primeCount++;
    }
    if (factorSum == num){
        perfectCount++;
    }
}
out.println ("Between " + valueL + " and " + valueH +
        "\nFound " + prime
```

1. Write a Java program that takes two numbers and ~~dive~~ divide them, and eventually print on the screen.

```
import java.util.Scanner;
publi class TaskOne {
    public static void main (String [ ] args) {
    Scanner sc = new Scanner (System.in);
    Int num1, num2;

    System.out.println ("Enter a number");
    num1 = sc.nextInt ();
    System.out.println ("Enter another number");
    num2 = sc.nextInt ();

    int quotient;
    quotient = (num1 / num2);
    System.out.println ( "Quotient:    " + quotient );
    }
}
```

2. Write a Java program that takes two numbers as input and ... the product of the two number.

```
import java.util.Scanner;
public class TaskTwo{
    public static void main (String [ ] args){
    Scanner sc = new Scanner (System.in);
    int x,y;

    System.out.println ("Enter a number");
     x = sc. nextInt ();
    System.out.println ("Enter another number");
     y = sc.nextInt();
     int product;
     product = x * y;
     System.out.println ("Product is:    " + product);
    }
}
```

Write a Java program to print the sum, multiply, subtract, divide and remainder of two numbers.

```
import java.util.Scanner;
public class TaskThree {
    public static void main (String [] args) {
    Scanner sc = new Scanner (System.in);
    int num1, num2;
    System.out.println ("Enter an Int");
    num1 = sc.nextInt();

    System.out.println ("Enter another Int");
    num2 = sc.nextInt ();
     int sum, product, difference, quotient, remainder;
     sum = num1 + num2;
     product = num1 * num2;
     difference = num1 - num2;
     quotient = num1 / num2;
     remainder = num1 % num2

     System.out.println ("Sum: " + sum);
     System.out.println ("Product: " + product);
     System.out.println ("Difference: " + difference);
     System.out.println ("Quotient: " + quotient);
     System.out.println ("Remainder: " + remainder);
    }
}
```

4. Write a Java program to print the area and perimeter of a c

```
Import    java.util.Scanner;
public    class  Task four {
    public static void main (String [ ] args) {
    Scanner  sc = new Scanner (System.in);
     int radius, area, circumference;
    System.out.println ("Enter the radius of a circle");
     double  radius =  sc.nextDouble ( );

     double  area = Math.PI  *  (radius * radius);
      System.out.println ("Area of a circle:  " + area);

      double  circumference = Math.PI  *  2  *  radius;
      System.out.println ("Circumference of a circle:    " + circumferen
      }
}
```

9

Write a Java program to print the area and perimeter of a rectangle.

```
import java.util.Scanner;
public class TaskFive {
    public static void main (String [] args) {
    Scanner sc = new Scanner (System.in);
    int length, width, area, perimeter;
    System.out.println (" Enter length of Rectangle");
    length = sc.nextInt ();
    System.out.println ("Enter width of Rectangle");
    width = sc.nextInt ();
    area = length * width;
    System.out.println ("Area: " + area);
    perimeter = 2 * (length + width);
    System.out.println ("Perimeter: " + perimeter);
    }
}
```