**Hands-On**

1. public class Main{

public static void main(String[] args) {

int x = 5;

while (x > 1) {

x = x + 1;

if (x < 3) {

System.out.println("small x");

}}}}

**Output: small x**

2. Personalize the Hello World program with your name so that it tells you Hello rather than the somewhat generic "World."

Program:

public class Main

{

public static void main(String[] args) {

System.out.println("Hello World .... I am Sowmiya");

}

}

**3.** Write a program that produces the following output:

Hello World!

It's been nice knowing you.

Goodbye world!

Program:

public class Main

{

public static void main(String[] args) {

System.out.println("Hello World!");

System.out.println("It's been nice knowing you.");

System.out.println("Goodbye world!");

}

}

4. Write a program that prints all the integers between zero and 36.

Program:

public class Main

{

public static void main(String[] args) {

for(int i=0;i<=36;i++){

System.out.println(i);

}

}

}

5. What does the following program print?

// This is the Hello Rank program in Java

class HelloRank {

      public static void main (String args[ ]) {

                    String name = "Rank";

                    /\* Now let's say hello \*/

                   System.out.println("Hello + name");

                    }

}

Output: Hello + name

6. What is wrong with this program?

// This is the Hello program in Java

class Hello {

public static void main (String args[ ]) {

         int i;

         System.out.print("Hello");                    i=0;

while (i <= args.length) {

     System.out.print(args[i] + " ");

                     i=i+1;                                         }

                        System.out.println(i);

         }

}

Output: Hello Exception in thread

7. What is the output of the following program?

import java.util.\*;  
public class Area {  
      public static void main(String[ ] args){  
          double a;  
    double r;  
    final double pi = Math.PI;  
  
    r = 1.0;  
    a = pi \* r \* r;  
    display(r,a);  
  
    r = 1.5;  
    a = pi \* r \* r;  
    display(r,a);  
  
    r = 2.0;  
     a = pi \* r \* r;  
    display(r,a);  
      }  
      static void display(double r, double a){  
           System.out.println("For radius = " + r +", area = " + a);  
      }  
}  
 output:

For radius=1.0, area=3.141592653589793

For radius=1.5, area=7.0685834705770345

For radius=2.0, area=12.566370614359172

8. There are exactly 2.54 centimeters to an inch. Write a program that takes a number of inches from the command line and converts it to centimeters.

Program: import java.util.Scanner;

public class Main

{ public static void main(String[] args) {

Scanner a= new Scanner(System.in);

int value=a.nextInt();

System.out.println(value\*2.54);

}

}

9. Write a program that reads two numbers from the command line, the number of hours worked by an employee and their base pay rate. Then output the total pay due

Program:

import java.util.Scanner;

public class Main

{ public static void main(String[] args) {

Scanner a= new Scanner(System.in);

int noh=a.nextInt();

int rate=a.nextInt();

System.out.println("Total pay due = "+noh\*rate);

}

}

10. What is the output of the following program?

class Hexy {

     public static void main (String[] args)    {

         Integer i = 42;

         String s = (i<40)?"life"i>50)?"universe":"everything";

         System.out.println(s);

     }

}

Output : error

11. Write a program that draws the following figures one above the other.

\* \* \* \* \*             \*

\* \* \* \* \*            \* \*

\* \* \* \* \*           \* \* \*

\* \* \* \* \*         \* \* \* \* \*

Now modify it to draw them next to each other like earlier.

Program:

public class Main

{

public static void main(String[] args) {

for(int i=1;i<=5;i++){

for(int j=1;j<=5;j++){

System.out.print("\*");

}

System.out.print("\n");

}

for(int i=1;i<=5;i++){

for(int j=1;j<=i;j++){

System.out.print("\*");

}

System.out.print("\n");

}

}

}