INSTITUTE OF SOFTWARE ENGINEERING

GRADUATE DIPLOMA IN SOFTWARE ENGINEERING

ASSIGNMENT NAME

Programming fundamentals

ASSIGNMENT NO

02

NUMBER OF QUESTIONS:40

NUMBER OF COMPLETED QUESTIONS: 39

NUMBER OF REMAINING QUESTIONS: 01

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BATCH NO: GDSE59

1.print() vs println()

a)class Example{

public static void main(String args[]){

System.out.print("hello java");

System.out.print("hello java");

}

}

A. hello javahello java

b) class Example{

public static void main(String args[]){

System.out.println("hello java");

System.out.println("hello java");

}

}

A. hello java

hello java

2. class Example{

public static void main(String args[]){

System.out.println("Name:Chathuranga Dilshan");

System.out.println("Address:103/2,");

System.out.println("Pinhena colony,");

System.out.println("Padagoda,");

System.out.println("Beruwala,");

}

}

3.java literals yanu sop thulata damiya saki agayanya(simple data)

1.integer(100,10,17276)

2.flouting point(0.3533,1.5363)

3.choracter literals(‘a’,’e’,’3’,)

4.Boolean (true,falce)

5.string (“kamal”,”2536”)

4. class Example{

public static void main(String args[]){

System.out.println("*");

System.out.println("* *");

```
                System.out.println ("*  *  *");
                  System.out.println("*  *  *  *");
                 System.out.println("*  *  *  *  *");
            }
}
5. class Example{
        public static void main(String args[]){
        System.out.println("*");
         System.out.println("**");
         System.out.println("***");
        System.out.println("****");
        System.out.println("*****");
        }
}
6. class Example{
         public static void main(String args[]){
         System.out.println("    *   ");
         System.out.println("  *   *  ");
         System.out.println("*   *   *");
         System.out.println("  *   *  ");
         System.out.println("    *   ");
         }
}
7. class Example{
        public static void main(String args[]){
           int i;
          i=100;
        int age=20;
        System.out.println("The age is:"+age);
        }
}
8. import java.util.*;
class Example{
         public static void main(String args[]){
                Scanner input=new Scanner(System.in);
```

```
                int x,y,z;
                System.out.print("Input your frist number : ");
                x=input.nextInt();
                System.out.print("Input your second number 2 : ");
                y=input.nextInt();
                z=x+y;
                System.out.println(z);
        }
}
9. class Example{
        public static void main(String args[]){
                int x=10;
                int y=20;
                System.out.println(x+" "+y);
                System.out.println(y+" "+x);
        }
}
10. import java.util.*;
    class Example{
        public static void main(String args[]){
                Scanner input=new Scanner(System.in);
                int x,y;
                System.out.print("Input number 1 : ");
                x=input.nextInt();
                System.out.print("Input number 2 : ");
                y=input.nextInt();
                System.out.println("values are:"+x+" and "+y);
        }
}
11. class Example{
        public static void main(String args[]){
                int computing,maths,science,english;// a
                computing=20;// b
                maths=50;// b
                science=35;//b
```

```
                english=75;//b
                int total;// c
                total=computing+maths+science+english;//c
                System.out.println("The total is:"+total);// d
                System.out.println("al marks="+total); // e
                System.out.println(computing+" "+maths+" "+science+" "+english); // f
                double average=0.0;// g
                average=total/4;// h
                System.out.println("The  average is:"+ average);// i
        }
}
```

12.
```
import java.util.*;
    class Example{
        public static void main(String args[]){
                Scanner input=new Scanner(System.in);
                double inche;
                double millimeters;
                System.out.print("Input your inche : ");
                inche=input.nextInt();
                millimeters=inche*25.4;
                System.out.println("inche: "+inche+" = "+"millimeters: "+millimeters);
        }
}
```

13.
```
import java.util.*;
    class Example{
        public static void main(String args[]){
                Scanner input=new Scanner(System.in);
                double ounce;
                double garam;
                System.out.print("Input your ounce : ");
                ounce=input.nextInt();
                garam=ounce*28.3495;
                System.out.println("ounce: "+ounce+" = "+"garam: "+garam);
        }
}
```

14. import java.util.*;

```
class Example{
        public static void main(String args[]){
                Scanner input=new Scanner(System.in);
                int age;
                System.out.print("Input your age : ");
                age=input.nextInt();
                System.out.println("new age :"+(age+3));
        }
}
```

15. import java.util.*;

```
    class Example{
        public static void main(String args[]){
                Scanner input=new Scanner(System.in);
                int a,b,c,d,e,f,g,h,l,m,total;
                double average;
                System.out.print("Input marks : ");
                a=input.nextInt();
                System.out.print("Input marks : ");
                b=input.nextInt();
                System.out.print("Input marks : ");
                c=input.nextInt();
                System.out.print("Input marks : ");
                d=input.nextInt();
                System.out.print("Input marks : ");
                e=input.nextInt();
                System.out.print("Input marks : ");
                f=input.nextInt();
                System.out.print("Input marks : ");
                g=input.nextInt();
                System.out.print("Input marks : ");
                h=input.nextInt();
                System.out.print("Input marks : ");
                l=input.nextInt();
                System.out.print("Input marks : ");
```

```
            m=input.nextInt();
            total=a+b+c+e+f+g+h+l+m;
            average=total/10;
            System.out.println("marks
            :["+a+","+b+","+c+","+d+","+e+","+f+","+g+","+h+","+l+","+m+"]");
            System.out.println("total :"+total);
            System.out.println("average :"+average);
        }
}
```

16. D.x=200;

Veriable name is x

```
    class Example{
        public static void main(String args[]){
            int x;
            //insert code//line 12
            x=200;
            System.out.println(x);
        }
    }
```

17.C. int x=10,y=20;

Veriable eka nirmanaya karana witama agayada labadiya haka

```
    class Example{
        public static void main(String args[]){
            int x=10,y=20;
            //insert code//line 12
            System.out.println(x);
            System.out.println(y);
        }
    }
```

18.

```
class Example{
    public static void main(String args[]){
        System.out.println("A\nB");
        System.out.println("CD");
        System.out.println("\nEF\n");
        System.out.println("G\nH");
```

```
        }
}
```

A. A

B

CD

EF

G

H

19. 60

10+20+30

10+2030

102030

102030

3030

102030

20.

```
System.out.println(0B11100100);//line 1
System.out.println(0b11100100);//line 2
System.out.println(0144);//line 4
System.out.println(0x64);//line 6
System.out.println(0xabc);//line 7
```

```
Example.java:5: error: ')' expected
        System.out.println(0B11100200);//line 3
                                       ^
Example.java:5: error: illegal start of expression
        System.out.println(0B11100200);//line 3
                                        ^
Example.java:7: error: integer number too large: 0148
        System.out.println(0148);//line 5
                           ^
Example.java:10: error: ')' expected
        System.out.println(0xabcg);//line 8
                                   ^
Example.java:10: error: illegal start of expression
```

```
        System.out.println(0xabcg);//line 8
                           ^
Example.java:11: error: hexadecimal numbers must contain at least one hexadecimal digit
        System.out.println(0X);//line 9
                        ^
Example.java:11: error: ';' expected
        System.out.println(0X);//line 9
                         ^
Example.java:12: error: hexadecimal numbers must contain at least one hexadecimal digit
        System.out.println(0X);//line 10
                        ^
Example.java:12: error: ';' expected
        System.out.println(0X);//line 10
                         ^
9 errors
```

21.

```
class Example{
    public static void main(String args[]){
        int x,sum;// a.
        x=1;// b.
        sum=0;// c.
        sum=sum+x;//d.
        System.out.println("The sum is:"+sum);// e.
    }
}
```

22.

23. B.x=100;

Veriyable eka nirmanaya kara athi nisa nawata x yana naming veriyable ekak nirmanaya kala nohaka. nirmanaya kala veriyable eka yedu naming pamanak daththa athulath kala haka.

```
class Example{
    public static void main(String args[]){
        int x;
        x=100;
        System.out.println(x);
    }
}
```

24. class Example{
```
        public static void main(String args[]){
                System.out.println("ABC\nXYZ\nPQR");
        }
    }
```
25. class Example{
```
        public static void main(String args[]){
                int x=10,y=20,z=30;
                System.out.println(x);
                System.out.println(y);
                System.out.println(z);
                int y=200;
                System.out.println(y);
        }
}
```
A. Example.java:7: error: variable y is already defined in method main(String[])
```
          int y=200;
              ^
  1 error
```
26. class Example{
```
        public static void main(String args[]){
                System.out.println("|"/"\"/"\"|");
        }
    }
```
27. class Example{
```
        public static void main(String args[]){
                System.out.println(""+"\"+/"+""+"\n"+"\n"");
        }
     }
```
28. class Example{
```
        public static void main(String args[]){
                System.out.println("Name :Niroth\ntotal :673\naverage :67.3\ngrade :B");
        }
    }
```
29. char 'a'='a';

char \u0061='a';

ch\u0061r a='a';

30. class Example{

```
public static void main(String args[]){
        int x,y,z;                  // line 1
        x=y=z=10;                   // line 2
        int a=12,b,c=4;  // line 3
        int p=10;                   // line 4
        int q=p;            // line 5
        int i=j=k=10;     // line 1
}
```

}

A.d.

```
Example.java:8: error: cannot find symbol
          int i=j=k=10;   // line 6
        ^
  symbol:   variable j
  location: class Example
Example.java:8: error: cannot find symbol
   int i=j=k=10;   // line 6
         ^
symbol:   variable k
 location: class Example
2 errors
```

31. a.int $x;

c. int _123;

e. int %percent;

32.e.compile-time error

```
Example.java:4: error: variable x might not have been initialized
        System.out.println(x+y+z);
              ^
Example.java:4: error: variable y might not have been initialized
        System.out.println(x+y+z);
                ^
Example.java:4: error: variable z might not have been initialized
```

System.out.println(x+y+z);

^

3 errors

33.e.compile time error

Example.java:4: error: variable x might not have been initialized

System.out.println(x);

^

1 error

34.d.when run,the program will print 34

34

35.line 1

Example.java:3: error: illegal escape character

char a='\c'; //line 1

^

Example.java:3: error: unclosed character literal

char a='\c'; //line 1

^

Example.java:3: error: unclosed character literal

char a='\c'; //line 1

^

3 errors

36.

A. System.out.println(1+2+3);

6

B. System.out.println("1"+"2"+"3");

123

C. System.out.println('1'+'2'+'3');

150

D. System.out.println('1'+" "+'2'+" "+'3');

1 2 3

E. System.out.println('A'+'B'+'C');

198

F. System.out.println("A"+"B"+"C");

ABC

G. System.out.println('A'+100+200);

365

H. System.out.println('A'+" "+'B'+" "+'C');

A B C

37.

```
class Example{
	public static void main(String args[]){
		char a='a';
		System.out.println(a=='\0061');
		System.out.println(\u0061=='\u0061');
		System.out.println(\u0061==97);
		\u0061='\u0041';
		System.out.println('A'=='\u0041');
		System.out.println(65=='\u0041');
		System.out.println(65==a);
		System.out.println('A'+100+200);
		System.out.println('\u0041'==a);
	}
}
```

A.

```
Example.java:4: error: unclosed character literal
	System.out.println(a=='\0061');
			   ^
Example.java:4: error: ';' expected
	System.out.println(a=='\0061');
				    ^
Example.java:4: error: unclosed character literal
	System.out.println(a=='\0061');
				    ^
3 errors
```

38.

a.System.out.println(0B1010);

b.System.out.println(B1010);

c.System.out.println(0B01010);

d.System.out.println(01010);

e.System.out.println(0x1010);

f.System.out.println(01012);

legal start of expression

39.age=age+10;

```
import java.util.*;
    class Example{
        public static void main(String args[]){
                Scanner input=new Scanner(System.in);
                System.out.print("Input your age : ");
                int age=input.nextInt();
                System.out.println("your current age is :"+age);
                age=age+10;
                System.out.println("your age after 10 years :"+age);
        }
}
```

```
Input your age : 12
your current age is :12
your age after 10 years :22
```

40.

```
import java.util.*;
    class Example{
        public static void main(String args[]){
                Scanner input=new Scanner(System.in);
                System.out.print("Input number one : ");
                int num1=input.nextInt();
                System.out.print("Input number two : ");
                int num2=input.nextInt();
                System.out.println(num1+" "+num2);
                System.out.println(num2+" "+num1);
                System.out.println(num1+" "+num2);
        }
}
```