

Assignment-1

```
QJA1--> 1 /*Write a java program to print your biodata?*/
2 //package assignment1;
3
4
5 public class A1 {
6     public static void main(String[] args) {
7         System.out.println("-----MY Biodata:-----");
8         System.out.println("My name is -> \t Somanath Singh");
9         System.out.println("City -> \t Jatani, Khordha, ODISHA");
10        System.out.println("Father's Name -> Jayant Singh");
11        System.out.println("Mother's Name -> Malati Singh");
12        System.out.println("College Name -> IGIT, Sarang");
13        System.out.println("Branch -> \t MCA");
14        System.out.println("Roll No -> \t 414058");
15    }
16 }
17
18
19
20
Output:
-----MY Biodata:-----
My name is -> Somanath Singh
City -> Jatani, Khordha, ODISHA
Father's Name -> Jayant Singh
Mother's Name -> Malati Singh
College Name -> IGIT, Sarang
Branch -> MCA
Roll No -> 414058
Press any key to continue . . . |
```

```
QJA2--> 1 /*Write a java program to find simple interest?*/
2
3
4 public class A2 {
5     public static void main(String[] args) {
6         float principalAmt=Float.parseFloat(args[0]);
7         float time=Float.parseFloat(args[1]);
8         float rateOfInt=Float.parseFloat(args[2]);
9         float simpleInt=0.0f;
10
11        simpleInt=(Float)(principalAmt*time*rateOfInt)/100;
12        System.out.println("Principal Amount= "+principalAmt+"Time= "+time+"Rate of Interest = "+rateOfInt);
13        System.out.println("Simple Interest is::"+simpleInt);
14    }
15 }
16
Output:
D:\RameshSirJava>javac A2.java
D:\RameshSirJava>java A2 1000 2 2.0
Principal Amount= 1000.0Time= 2.0Rate of Interest =5.6
Simple Interest is::112.0
D:\RameshSirJava>
```

```
QJA3--> 1 /*Write a java program for temperature conversion?*/
2
3
4 public class A3 {
5     public static void main(String[] args) {
6         float celsTemp=Float.parseFloat(args[0]);
7         System.out.println("CelsTemp*\"Celsius(C) Temperature in Fahrenheit(F) is "+*((celsTemp*9/5)+32)+"\"F");
8     }
9 }
10
Output:
D:\RameshSirJava>javac A3.java
D:\RameshSirJava>java A3 44.65
44.65Celsius(7°C) Temperature in Fahrenheit(7°F) is 112.37°F
D:\RameshSirJava>
```

```
QJAS1-> 1 /*Sum of all digits of any 4 digit numbers*/
2
3 public class AS1 {
4     static int sum=0; //Static Variable
5     public static void main(String[] args) {
6         int nums=4578;
7         int temp=num;
8
9         int rem=num%10;
10        sum=sum+rem;
11        num=num/10;
12
13        rem=num%10;
14        sum=sum+rem;
15        num=num/10;
16
17        rem=num%10;
18        sum=sum+rem;
19        num=num/10;
20
21        sum=sum+num;
22        System.out.println("Sum of "+temp+" is :: "+sum);
23    }
24 }
Output:
D:\RameshSirJava>javac AS1.java
D:\RameshSirJava>java AS1
Sum of 4578 is :: 24
D:\RameshSirJava>
```

```
QJASII /*find the face value and position value of any 4 digit number?*/
1
2 public class ASII {
3     public static void main(String[] args)
4     {
5         int num=Integer.parseInt(args[0]);
6         System.out.println("First Number\n\"Face Value="+((num/1000)*"\n\"Position Value="+((num/1000*1000));
7         System.out.println("Second Number\n\"Face Value="+((num/100%10)*"\n\"Position Value="+((num/100%10*100));
8         System.out.println("Third Number\n\"Face Value="+((num/10%10)*"\n\"Position Value="+((num/10%10*10));
9         System.out.println("First Number\n\"Face Value="+((num%10)*"\n\"Position Value="+((num%10));
10    }
11 }
Output:
D:\RameshSirJava>javac ASII.java
D:\RameshSirJava>java ASII 4567
First Number
Face Value=4
Position Value=4000
Second Number
Face Value=5
Position Value=500
Third Number
Face Value=6
Position Value=60
First Number
Face Value=7
Position Value=7
```

```
QJASIII-> 1 /*Find the value available at position required by user it may be 10,
2 100 or 1000?*/
3
4 public class ASIII {
5     public static void main(String[] args)
6     {
7         int num=Integer.parseInt(args[0]);
8         System.out.println("\n The Number is "+num);
9         System.out.println("\n The value at 1000 position : "+num/1000);
10        System.out.println("\n The value at 100 position : "+num/100%10);
11        System.out.println("\n The value at 10 position : "+num/10%10);
12    }
13 }
Output:
D:\RameshSirJava>javac ASIII.java
D:\RameshSirJava>java ASIII 4578
The Number is4578
The value at 1000 position : 4
The value at 100 position : 5
The value at 10 position : 7
D:\RameshSirJava>
```

```
QJASIV-> 1 /*Sum of product of consecutive digits of any 4 digit number?
2 Suppose num=1234 then outputs= 4*3+3*2+2*1 ?*/
3
4 public class ASIV {
5     public static void main(String[] args) {
6         int num =Integer.parseInt(args[0]),sop=0;
7
8         int rem1=num%10;
9         rem2=(num/10)%10;
10        sop=sop+(rem1*rem2);
11
12        rem1=rem2;
13        rem2=(num/100)%10;
14        sop=sop+(rem1*rem2);
15
16        rem1=rem2;
17        rem2=(num/1000)%10;
18        sop=sop+(rem1*rem2);
19        System.out.println(" Sum of product of consecutive digits i.e. "+num+" is "+ sop);
20    }
21 }
Output:
D:\RameshSirJava>javac ASIV.java
D:\RameshSirJava>java ASIV 1234
Sum of product of consecutive digits i.e. 1234 is 20
D:\RameshSirJava>
```

```
QJASV-> 1 /*Find sum of product of corresponding digits of two any 4 digit number
2 Such as 1234 m=7896 outputs=4*7+3*8+2*9+1*7
3
4 public class ASv {
5     public static void main(String[] args) {
6         int m=Integer.parseInt(args[0]);
7         int n=Integer.parseInt(args[1]);
8         int sop=0;
9
10        int rem1=m%10;
11        int rem2=m%10;
12        sop=sop+(rem1*rem2);
13
14        rem1=(m/10)%10;
15        rem2=(m/10)%10;
16        sop=sop+(rem1*rem2);
17
18        rem1=(m/100)%10;
19        rem2=(m/100)%10;
20        sop=sop+(rem1*rem2);
21
22        rem1=(m/1000)%10;
23        rem2=(m/1000)%10;
24        sop=sop+(rem1*rem2);
25        System.out.println("Sum of product of corresponding digits of two any 4 digit number i.e. "+m+" & "+n+" is "+sop);
26    }
27 }
Output:
D:\RameshSirJava>javac ASv.java
D:\RameshSirJava>java ASv 4567 1234
Sum of product of corresponding digits of two any 4 digit number i.e 4567 & 1234 is 60
D:\RameshSirJava>
```

```
QJASVI-> 1 /*find bitwise and , or , and xor of 2nd and 4th digit of any 4 digit
2 number?*/
3
4 public class ASVI {
5     public static void main(String[] args)
6     {
7         int num=Integer.parseInt(args[0]);
8         int and,or,xor;
9
10        int secondNum=num/100%10;
11        int forthNum=num%10;
12        //bitwise and
13        and=secondNum & forthNum;
14        //bitwise or
15        or=secondNum | forthNum;
16        //bitwise xor
17        xor=secondNum ^ forthNum;
18        System.out.println(" Bitwise and of second and fourth digit of "+num+" is "+and);
19        System.out.println(" Bitwise or of second and fourth digit of "+num+" is "+or);
20        System.out.println(" Bitwise xor of second and fourth digit of "+num+" is "+xor);
21    }
22 }
Output:
D:\RameshSirJava>javac ASVI.java
D:\RameshSirJava>java ASVI 4589
Bitwise and of second and fourth digit of 4589 is 1
Bitwise or of second and fourth digit of 4589 is 13
Bitwise xor of second and fourth digit of 4589 is 12
D:\RameshSirJava>
```

```
QJASVII-> 1 /* Find left shift, right shift and zero fill of summation of all digits of any 4 digit number and
2 it will be shifted by 3rd digit of any 4 digit number?*/
3
4 public class ASVII {
5     public static void main(String[] args){
6         int num=Integer.parseInt(args[0]);
7         int n=num;
8         int sum=0;
9
10        int a=n%10;
11        sum=sum+a;
12        n=n/10;
13
14        a=n%10;
15        sum=sum+a;
16        n=n/10;
17
18        a=n%10;
19        sum=sum+a;
20        n=n/10;
21
22        sum=sum+n;
23
24        //finding right shift by 3digit
25        int r=sum>>3;
26        //finding left shift by 3 digit
27        int l=sum<<3;
28        //finding right shift with zero fill
29        int z=sum>>3;
30        System.out.println(" Right Shift by 3 Of sum of number "+num+" is "+r);
31        System.out.println(" Left Shift by 3 Of sum of number "+num+" is "+l);
32        System.out.println(" Right Shift zero fill by 3 Of sum of number "+num+" is "+z);
33    }
34 }
Output:
D:\RameshSirJava>javac ASVII.java
D:\RameshSirJava>java ASVII 4569
Right Shift by 3 Of sum of number 4569 is 3
Left Shift by 3 Of sum of number 4569 is 192
Right Shift zero fill by 3 Of sum of number 4569 is 3
D:\RameshSirJava>
```

```
QJA6a--> 1 /*Sum of all even digits of any 4 digit number*/
2
3 public class A6a {
4     public static void main(String[] args){
5         int num=Integer.parseInt(args[0]);
6         int result=0;
7
8         int rem=num%10;
9         result+=(rem%2==0)?rem:0;
10
11        rem=(num/10)%10;
12        result+=(rem%2==0)?rem:0;
13
14        rem=(num/100)%10;
15        result+=(rem%2==0)?rem:0;
16
17        rem=(num/1000)%10;
18        result+=(rem%2==0)?rem:0;
19        System.out.println("Sum of all even digits numbers of a 4 Digits number i.e "+num+" is :: "+result);
20    }
21 }
Output:
D:\RameshSirJava>javac A6a.java
D:\RameshSirJava>java A6a 7896
Sum of all even digits numbers of a 4 Digits number i.e 7896 is :: 14
D:\RameshSirJava>
```

```
QJA6b-> 1 /*Sum of all odd digits of any 4 digit number*/
2
3
4 public class A6b {
5     public static void main(String[] args) {
6         int num=Integer.parseInt(args[0]);
7         int result=0;
8
9         int rem=num%10;
10        result+=(rem%2!=0)?rem:0;
11
12        rem=(num/10)%10;
13        result+=(rem%2!=0)?rem:0;
14
15        rem=(num/100)%10;
16        result+=(rem%2!=0)?rem:0;
17
18        rem=(num/1000)%10;
19        result+=(rem%2!=0)?rem:0;
20        System.out.println("Sum of all Odd digits numbers of a 4 Digits number i.e "+num+" is :: "+result);
21    }
22 }
Output:
D:\RameshSirJava>javac A6b.java
D:\RameshSirJava>java A6b 4563
Sum of all Odd digits numbers of a 4 Digits number i.e 4563 is :: 8
D:\RameshSirJava>
```

```
QJA6C--> 1 /*Difference between average of all even digits except divisible by 4 and
2 average of all odd digits except divisible by 3 of any 4 digit number */
3
4 public class A6C {
5     public static void main(String[] args) {
6         int n,r1,r2,c1,c2,sum1,sum2,avg1,avg2,diff;
7         sum1=0;
8         c1=0;
9         c2=0;
10
11        n=Integer.parseInt(args[0]);
12        r=n%10;
13        r1=(%2==0)?((%4==0)?0:((c1<+c1)?r:0)):0;
14        r2=(%2==0)?((%3==0)?0:((c2<+c2)?r:0)):0;
15        n=n/10;
16        sum1=sum1+r1;
17        sum2=sum2+r2;
18
19        r=n%10;
20        r1=(%2==0)?((%4==0)?0:((c1<+c1)?r:0)):0;
21        r2=(%2==0)?((%3==0)?0:((c2<+c2)?r:0)):0;
22        n=n/10;
23        sum1=sum1+r1;
24        sum2=sum2+r2;
25
26        r=n%10;
27        r1=(%2==0)?((%4==0)?0:((c1<+c1)?r:0)):0;
28        r2=(%2==0)?((%3==0)?0:((c2<+c2)?r:0)):0;
29        n=n/10;
30        sum1=sum1+r1;
31        sum2=sum2+r2;
32
33        r=n%10;
34        r1=(%2==0)?((%4==0)?0:((c1<+c1)?r:0)):0;
35        r2=(%2==0)?((%3==0)?0:((c2<+c2)?r:0)):0;
36        n=n/10;
37        sum1=sum1+r1;
38        sum2=sum2+r2;
39
40        System.out.println("Sum of even no = "+sum1);
41        System.out.println("Sum of odd no = "+sum2);
42
43        avg1=sum1/c1;
44        avg2=sum2/c2;
45
46        System.out.println(" Average of Even no = "+avg1);
47        System.out.println(" Average of Odd no = "+avg2);
48
49        diff=avg1-avg2;
50        diff=(diff<0)?-diff:diff;
51
52        System.out.println("Difference between two average = "+diff);
53    }
54 }
Output:
D:\RameshSirJava>javac A6C.java
D:\RameshSirJava>java A6C 5632
Sum of even no = 8
Sum of odd no = 5
Average of Even no =4
Average of Odd no =4
Difference between two average = 1
D:\RameshSirJava>
```

```
QJA6D--> 1 /*1) Sum of product of consecutive even digits of any 4 digit number?
2 2) Suppose num 1624 then outputs= 4*2+2*6 ?
3 */
4
5 public class A6D {
6     public static void main(String[] args) {
7         int num = Integer.parseInt(args[0]);
8         int sum=0;
9
10        int rem1 = num % 10;
11        int rem2 = (num / 10) % 10;
12        sum+=((rem1%2==0&& rem2%2==0)?(rem1*rem2):0);
13
14        rem1=rem2;
15        rem2=(num/100)%10;
16        sum+=((rem1%2==0&& rem2%2==0)?(rem1*rem2):0);
17
18        rem1=rem2;
19        rem2=(num/1000)%10;
20        sum+=((rem1%2==0&& rem2%2==0)?(rem1*rem2):0);
21        System.out.println("Sum of Product of Consecutive Even Digits of "+num+" is :: "+sum);
22    }
23 }
Output:
D:\RameshSirJava>javac A6D.java
D:\RameshSirJava>java A6D 1624
Sum of Product of Consecutive Even Digits of 1624 is ::20
D:\RameshSirJava>
```

```
QJA6E--> 1 /* Sum of product of consecutive ODD digits of any 4 digit number?
2 3) Suppose num 1356 then outputs= 1*3+3*5 ?
3 */
4
5 public class A6E {
6     public static void main(String[] args) {
7         int num = Integer.parseInt(args[0]);
8         int sum=0;
9
10        int rem1 = num % 10;
11        int rem2 = (num / 10) % 10;
12        sum+=((rem1%2!=0&& rem2%2!=0)?(rem1*rem2):0);
13
14        rem1=rem2;
15        rem2=(num/100)%10;
16        sum+=((rem1%2!=0&& rem2%2!=0)?(rem1*rem2):0);
17
18        rem1=rem2;
19        rem2=(num/1000)%10;
20        sum+=((rem1%2!=0&& rem2%2!=0)?(rem1*rem2):0);
21        System.out.println("Sum of Product of Consecutive ODD Digits of "+num+" is :: "+sum);
22    }
23 }
Output:
D:\RameshSirJava>javac A6E.java
D:\RameshSirJava>java A6E 5378
Sum of Product of Consecutive ODD Digits of 5378 is ::36
D:\RameshSirJava>
```

```
QJA6F --> 1 /*Difference between Sum of product of consecutive even digits except 2
2 and 6 and Sum of product of consecutive odd digits except 3 and 7 of any 4 digit
3 number */
4
5 public class A6F {
6     public static void main(String[] args) {
7         int n,m,r1,r2,r3,r4,sum1,sum2,diff;
8         sum1=0;
9         sum2=0;
10
11        n=Integer.parseInt(args[0]);
12        m=n;
13
14        r=n%10;
15        r1=(%2==0)?((r!=2)&&(r!=6)?r:1):1;
16        n=n/10;
17
18        r=n%10;
19        r2=(%2==0)?((r!=2)&&(r!=6)?r:1):1;
20        n=n/10;
21
22        sum1+=((r1%2==0)&&(r2%2==0)?(sum1+1*r2):sum1);
23
24        r=n%10;
25        r3=(%2==0)?((r!=2)&&(r!=6)?r:1):1;
26        n=n/10;
27
28        sum1+=((r2%2==0)&&(r3%2==0)?(sum1+1*r2):sum1);
29
30        r=n%10;
31        r4=(%2==0)?((r!=2)&&(r!=6)?r:1):1;
32        n=n/10;
33
34        sum1+=((r3%2==0)&&(r4%2==0)?(sum1+1*r3):sum1);
35
36        System.out.println("sum of product of consecutive even no is"+sum1);
37
38        r=n%10;
39        r1=(%2==0)?0:((r!=3)&&(r!=7)?r:0);
40        n=n/10;
41
42        r=n%10;
43        r2=(%2==0)?0:((r!=3)&&(r!=7)?r:0);
44        n=n/10;
45
46        sum2+=((r1%2==0)&&(r2%2==0)?sum2+1*r2);
47
48        r=n%10;
49        r3=(%2==0)?0:((r!=3)&&(r!=7)?r:0);
50        n=n/10;
51
52        sum2+=((r2%2==0)&&(r3%2==0)?sum2+1*r2);
53
54        r=n%10;
55        r4=(%2==0)?0:((r!=3)&&(r!=7)?r:0);
56        n=n/10;
57
58        sum2+=((r3%2==0)&&(r4%2==0)?sum2+1*r3);
59
60        System.out.println("Sum of product of consecutive odd no is"+sum2);
61
62        diff=sum1-sum2;
63        diff=(diff<0)?-diff:diff;
64
65        System.out.println("Difference between Sum of product of consecutive even digits and Sum of product of consecutive odd digits"+diff);
66    }
67 }
Output:
D:\RameshSirJava>javac A6F.java
D:\RameshSirJava>java A6F 4859
sum of product of consecutive even no is=32
sum of product of consecutive odd no is=16
Difference between Sum of product of consecutive even digits and Sum of product of consecutive odd digits=13
D:\RameshSirJava>
```

```
QJA6G--> 1 /*Write a java program to find sum of product of corresponding even digits of
2 first any digit number and corresponding odd digit of any 4 digit number Such as
3 n=1234 m 4567 outputs=4*7+2*5 ? */
4
5 public class A6G {
6     public static void main(String[] args) {
7         int n1,n2,r1,r2,sum;
8         sum=0;
9
10        n1=Integer.parseInt(args[0]);
11        n2=Integer.parseInt(args[1]);
12
13        int r = n1%10;
14        r1=(%2==0)?r:0;
15        n1=n1/10;
16        r=n2%10;
17        r2=(%2==0)?r:0;
18        n2=n2/10;
19        sum=sum+1*r2;
20
21        r = n1%10;
22        r1=(%2==0)?r:0;
23        n1=n1/10;
24        r=n2%10;
25        r2=(%2==0)?r:0;
26        n2=n2/10;
27        sum=sum+1*r2;
28
29        r = n1%10;
30        r1=(%2==0)?r:0;
31        n1=n1/10;
32        r=n2%10;
33        r2=(%2==0)?r:0;
34        n2=n2/10;
35        sum=sum+1*r2;
36
37        r = n1%10;
38        r1=(%2==0)?r:0;
39        n1=n1/10;
40        r=n2%10;
41        r2=(%2==0)?r:0;
42        n2=n2/10;
43        sum=sum+1*r2;
44
45        System.out.println("Sum of product of corresponding digits of two any 4 digit number is"+sum);
46    }
47 }
Output:
D:\RameshSirJava>javac A6G.java
D:\RameshSirJava>java A6G 1234 4567
Sum of product of corresponding digits of two any 4 digit number is=38
D:\RameshSirJava>
```

Thank you