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## Assignment-1

### Sol-1

The image displays two screenshots of the Hackerblocks IDE interface, showing the solution to a problem. The IDE is running on a Windows operating system, as indicated by the taskbar at the bottom.

The top screenshot shows the initial code in the Code Editor:

```
1 import java.util.*;
2 public class Main {
3     public static void main(String args[]) {
4         Scanner input=new Scanner (system.in);
5         int n=input.nextInt();
6         sumofdigits(n);
7     }
8     private static void sumofdigits(int n){
9         int sumofodddigits=0;
10        int sumofevendigits=0;
11        int i=1;
12        while(n!=0){
13            int temp=n;
14            temp=temp%10;
15            if(i==1){
16                sumofodddigits=sumofodddigits+temp;
17                i=2;
18            }
19            else{
20                sumofevendigits=sumofevendigits+temp;
21                i=1;
22            }
23        }
24        system.out.println(sumofodddigits);
25        system.out.println(sumofevendigits);
26    }
27 }
```

The bottom screenshot shows the same code, but with the input field set to 2635. The code is ready to be compiled and tested.

Hackerblocks

https://hack.codingblocks.com/app/contests/4475/184/problem

Learn Practice Get Hired IDE

Hi, somyagu pta\_cs22

{...} Code Editor Java 8

```
1 import java.util.*;
2 public class Main {
3     void binary(int n){
4         int rem;
5         int sum=0;
6         int x=0;
7         while(n>0){
8             rem=n%10;
9             sum=(int)(Math.pow(2,x))*rem+sum;
10            n=n/10;
11            x++;
12        }
13        System.out.println(sum);
14    }
15 }
16 public static void main(String args[]){
17     Scanner input=new Scanner (System.in);
18     int n=input.nextInt();
19     Main a=new Main();
20     a.binary(n);
21 }
```

Provide Custom Input

101010

Compile and Test Submit Code

23:30 25-09-2023

Hackerblocks

https://hack.codingblocks.com/app/contests/4475/132/problem

Learn Practice Get Hired IDE

Hi, somyagu pta\_cs22

```
1 import java.util.Scanner;
2 public class Main {
3     public static void main(String[] args) {
4         Scanner scanner=new Scanner(System.in);
5         String input=scanner.nextLine();
6         char[] digits=input.toCharArray();
7         if(digits[0]!='5'){
8             digits[0]=(char)('9'-digits[0]+'0');
9         }
10        for(int i=1;i<digits.length;i++){
11            if(digits[i]>'4'){
12                digits[i]=(char)('9'-digits[i]+'0');
13            }
14        }
15        if(digits[0]!='0'){
16            digits[0]='9';
17        }
18        String result=new String(digits);
19        System.out.println(result);
20    }
21 }
```

Provide Custom Input

4545

Compile and Test Submit Code

00:47 26-09-2023

Hackerblocks

https://hack.codingblocks.com/app/contests/4475/215/problem

Learn Practice Get Hired IDE

Hi, somyagu pta\_cs22

Dashboard Daily Code Contests Practice Compete

[...] Code Editor Java 8

```
1 import java.util.*;
2 public class Main {
3     public static void main(String args[]) {
4         Scanner input=new Scanner (System.in);
5         int m=input.nextInt();
6         int n=input.nextInt();
7         int hcf=1,lcm=1;
8         for(int i=1;i<=m;i++){
9             if(m%i==0 && n%i==0){
10                 hcf=i;
11             }
12         }
13         lcm=(m*n)/hcf;
14         System.out.println(lcm);
15     }
16 }
17
```

Provide Custom Input

4  
6

Compile and Test Submit Code

23:31 25-09-2023

Hackerblocks

https://hack.codingblocks.com/app/contests/4475/242/problem

Learn Practice Get Hired IDE

Hi, somyagu pta\_cs22

Dashboard Daily Code Contests Practice Compete

[...] Code Editor Java 8

```
1 import java.util.*;
2 public class Main {
3     public static void main(String args[]) {
4         Scanner input=new Scanner(System.in);
5         int n=input.nextInt();
6         int a=0,b=1,c=0;
7         for(int i=2;i<=n;i++){
8             c=a+b;
9             a=b;
10            b=c;
11        }
12        System.out.println(c);
13    }
14 }
15
```

Provide Custom Input

10

Compile and Test Submit Code

23:31 25-09-2023

Hackerblocks

https://hack.codingblocks.com/app/contests/4475/698/problem

Learn Practice Get Hired IDE

Hi, somyagu pta\_cs22

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{...} Code Editor Java 8

```
1 import java.util.*;
2 public class Main {
3     public static void main(String args[]) {
4         Scanner input=new Scanner (System.in);
5         int n=input.nextInt();
6         int pow=1;
7         int invert=0;
8         while(n>0){
9             int digit=n%10;
10            n=n/10;
11            invert+=pow*Math.pow(10,digit-1);
12            pow++;
13        }
14        System.out.println(invert);
15    }
16 }
```

Provide Custom Input

32145

Compile and Test Submit Code

23:32 25-09-2023

Hackerblocks

https://hack.codingblocks.com/app/contests/4475/560/problem

Learn Practice Get Hired IDE

Hi, somyagu pta\_cs22

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{...} Code Editor Java 8

```
1 import java.util.*;
2 public class Main {
3     public static void main(String args[]) {
4         Scanner input=new Scanner (System.in);
5         int min=input.nextInt();
6         int max=input.nextInt();
7         int step=input.nextInt();
8         int i=min;
9         while(i<=max){
10            int c=((i-32)*5)/9;
11            System.out.println(i+" "+c);
12            i=i+step;
13        }
14    }
15 }
16 }
```

Provide Custom Input

0  
100  
20

Compile and Test Submit Code

23:32 25-09-2023

Hackerblocks

https://hack.codingblocks.com/app/contests/4475/1040/problem

Learn Practice Get Hired IDE

Hi, somyagu pta\_cs22

```
1 import java.util.*;
2 public class Main {
3     public static void main(String args[]) {
4         Scanner input=new Scanner (System.in);
5         int m=input.nextInt();
6         int n=input.nextInt();
7         int hcf=0;
8         for(int i=1;i<=m;i++){
9             if(m%i==0 && n%i==0){
10                 hcf=i;
11             }
12         }
13         System.out.println(hcf);
14     }
15 }
16
17
```

Provide Custom Input

16  
24

Compile and Test Submit Code

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ENG IN 23:33 25-09-2023

Hackerblocks

https://hack.codingblocks.com/app/contests/4475/919/problem

Learn Practice Get Hired IDE

Hi, somyagu pta\_cs22

[...] Code Editor Java 8

```
1 import java.util.*;
2 public class Main {
3     public static void main(String args[]) {
4         Scanner input=new Scanner (System.in);
5         int n=input.nextInt();
6         int count=0;
7         for(int i=2;i<=n;i++){
8             if(n%i==0){
9                 count++;
10             }
11         }
12         if(count==0){
13             System.out.println("Prime");
14         }
15         else{
16             System.out.println("Not Prime");
17         }
18     }
19 }
20
```

Provide Custom Input

3

Compile and Test Submit Code

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Hackerblocks

https://hack.codingblocks.com/app/contests/4475/161/problem

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Hi, somya.gu pta\_cs22

{...} Code Editor Java 8

```
1 import java.util.*;
2 public class Main {
3     public static void main(String args[]) {
4         Scanner input=new Scanner(System.in);
5         long n=input.nextLong();
6         long ans=0;
7         if(n==0)
8             ans=5;
9         long mul=1;
10        while(n!=0){
11            long rem=n%10;
12            if(rem==0){
13                long k=rem+5;
14                ans=ans+k*mul;
15            }
16            else{
17                ans=ans+rem*mul;
18            }
19            mul*=10;
20            n=n/10;
21        }
22    }
23 }
```

Provide Custom Input

102

Compile and Test Submit Code

00:47 26-09-2023

Hackerblocks

https://hack.codingblocks.com/app/contests/4475/1102/problem

Learn Practice Get Hired IDE

Hi, somya.gu pta\_cs22

```
6 int rem,rev=0,c=n,count=0,x=n;
7 while(x>0){
8     rem=x%10;
9     x=x/10;
10    count++;
11 }
12 while(n>0){
13     rem=n%10;
14     rev=(int)Math.pow(rem,count)+rev;
15     n=n/10;
16 }
17 if(rev==c){
18     System.out.println("true");
19 }
20 else{
21     System.out.println("false");
22 }
23 }
24 }
```

Provide Custom Input

371

Compile and Test Submit Code

00:51 26-09-2023

Hackerblocks

https://hack.codingblocks.com/app/contests/4475/1102/problem

Learn Practice Get Hired IDE

Hi, somya.gu pta\_cs22

```
1 import java.util.*;
2 public class Main {
3     public static void main(String args[]) {
4         Scanner input=new Scanner (System.in);
5         int n=input.nextInt();
6         int rem,rev=0,c=n,count=0,x=n;
7         while(x>0){
8             rem=x%10;
9             x=x/10;
10            count++;
11        }
12        while(n>0){
13            rem=n%10;
14            rev=(int)Math.pow(rem,count)+rev;
15            n=n/10;
16        }
17        if(rev==c){
18            System.out.println("true");
19        }
20        else{
21            System.out.println("false");
22        }
23    }
24 }
```

Provide Custom Input

371

Compile and Test Submit Code

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Hackerblocks

https://hack.codingblocks.com/app/contests/4475/853/problem

Learn Practice Get Hired IDE

Hi, somya.gu pta\_cs22

```
14 sum=sum+rem;
15 }
16 else{
17     sum2=sum2+rem;
18 }
19 car1=car1/10;
20 }
21 if (sum2%4==0||sum%3==0){
22     System.out.println("Yes");
23 }
24 else{
25     System.out.println("No");
26 }
27 i++;
28 }
29 }
30 }
31 }
32 }
```

Provide Custom Input

2  
12345  
12134

Compile and Test Submit Code

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Hackerblocks

https://hack.codingblocks.com/app/contests/4475/853/problem

Learn Practice Get Hired IDE

Hi, somya.gu pta\_cs22

[...] Code Editor Java 8

```
1 import java.util.*;
2 public class Main {
3     public static void main(String args[]) {
4         Scanner input=new Scanner (System.in);
5         int n=input.nextInt();
6         int i=0;
7         while(i<n)
8         {
9             int car1=input.nextInt();
10            int sum=0,sum2=0,rem=0;
11            while(car1>0){
12                rem=car1%10;
13                if(rem%2!=0){
14                    sum=sum+rem;
15                }
16                else{
17                    sum2=sum2+rem;
18                }
19                car1=car1/10;
20            }
21            if (sum2%4==0||sum%3==0){
```

Provide Custom Input

2  
12345  
12134

Compile and Test Submit Code

Search

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Hackerblocks

https://hack.codingblocks.com/app/contests/4475/696/problem

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Hi, somya.gu pta\_cs22

[...] Code Editor Java 8

```
12 while(sum_ay>=0 && sum_hr>=0){
13     sum_ay=sum_ay+ay;
14     sum_hr=sum_hr+hr;
15     ay+=2;
16     hr+=2;
17     if(sum_ay>=0){
18         System.out.println("harshit");
19         break;
20     }
21     else if(sum_hr>=n){
22         System.out.println("Aayush");
23         break;
24     }
25     else{
26         continue;
27     }
28 }
29 i++;
30 }
31 }
32 }
```

Provide Custom Input

2  
9 3  
8 11

Compile and Test Submit Code

Search

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Hackerblocks

https://hack.codingblocks.com/app/contests/4475/696/problem

Learn Practice Get Hired IDE

Hi, somya.gu pta\_cs22

Code Editor

```
1 import java.util.*;
2 public class Main {
3     public static void main(String args[]) {
4         Scanner input=new Scanner (System.in);
5         int t=input.nextInt();
6         int i=0;
7         while(t>0){
8             int m=input.nextInt();
9             int n=input.nextInt();
10            int sum_hr=0,ay=1;
11            while(sum_ay>0 && sum_hr>=0){
12                sum_ay=sum_ay+ay;
13                sum_hr=sum_hr+hr;
14                ay+=2;
15                hr+=2;
16            }
17            if(sum_ay>=m){
18                System.out.println("Harshit");
19                break;
20            }
21            else if(sum_hr>=n){
```

Provide Custom Input

2  
9 3  
8 11

Compile and Test Submit Code

Hackerblocks

https://hack.codingblocks.com/app/contests/4475/495/problem

Learn Practice Get Hired IDE

Hi, somya.gu pta\_cs22

```
21 }
22 return sum;
23 }
24 static boolean isBostonNumber(int n){
25     int digitSum=sumOfDigits(n);
26     int primeFactorSum = sumOfPrimeFactor(n);
27     return digitSum==primeFactorSum;
28 }
29 public static void Main(String args[]){
30     Scanner scanner=new Scanner(System.in);
31     int N=scanner.nextInt();
32
33     if(isBotonNumber(N)){
34         System.out.println("1");
35     }
36     else{
37         System.out.println("0");
38     }
39 }
40
41 }
```

Provide Custom Input

378

Compile and Test Submit Code

Hackerblocks

https://hack.codingblocks.com/app/contests/4475/495/problem

Learn Practice Get Hired IDE

Hi, somya.gu pta\_cs22

Code Editor

```
1 import java.util.Scanner;
2 public class Main {
3     static int sumOfDigits(int n){
4         int sum=0;
5         while (n>0){
6             sum+=n%10;
7             n/=10;
8         }
9         return sum;
10    }
11    static int sumOfPrimeFactors(int n){
12        int sum=0;
13        for(int i=2;i<=n;i++){
14            while(n%i==0){
15                sum+=sumOfDigits(i);
16                n/=i;
17            }
18        }
19        if(n>1){
20            sum+=sumOfDigits(n);
21        }
22    }
23 }
```

Provide Custom Input

378

Compile and Test Submit Code

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Search 27° ENG IN 00:49 26-09-2023

Hackerblocks

https://hack.codingblocks.com/app/contests/4475/291/problem

Learn Practice Get Hired IDE

Hi, somya.gu pta\_cs22

Code Editor

```
5 int n1=input.nextInt();
6 int n2=input.nextInt();
7 for(int i=m1;i<=n2;i++){
8     int rem,rev=0,count=0,check=i,remainder,c=i;
9
10    while(check>0){
11        rem=check%10;
12        count++;
13        check=check/10;
14    }
15    while(c>0){
16        remainder=c%10;
17        rev=(int)Math.pow(remainder,count)+rev;
18        c=c/10;
19    }
20    if(rev==i){
21        System.out.println(i);
22    }
23 }
```

Provide Custom Input

400  
1000

Compile and Test Submit Code

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Hackerblocks

https://hack.codingblocks.com/app/contests/4475/291/problem

Learn Practice Get Hired IDE

Hi, somya.gu pta\_cs22

{...} Code Editor Java 8

```
1 import java.util.*;
2 public class Main {
3     public static void main(String args[]) {
4         Scanner input=new Scanner (System.in);
5         int n1=input.nextInt();
6         int n2=input.nextInt();
7         for(int i=n1;i<=n2;i++){
8             int rem,rev=0,count=0,check=1,remainder,c=i;
9
10            while(check>0){
11                rem=check%10;
12                count++;
13                check=check/10;
14            }
15            while(c>0){
16                remainder=c%10;
17                rev+=(int)Math.pow(remainder,count)+rev;
18                c=c/10;
19            }
20            if(rev==i){
21                System.out.println(i);
22            }
23        }
24    }
25 }
```

Provide Custom Input

400  
1000

Compile and Test Submit Code

00:48 26-09-2023

Hackerblocks

https://hack.codingblocks.com/app/contests/4475/206/problem

Learn Practice Get Hired IDE

Hi, somya.gu pta\_cs22

{...} Code Editor Java 8

```
1 import java.util.*;
2 public class Main {
3     public static void main(String args[]) {
4         Scanner input=new Scanner(System.in);
5
6         int a[]=new int[1000];
7         int sum=0;
8         for(int i=0;i<a.length;i++){
9             a[i]=input.nextInt();
10            sum=sum+a[i];
11            if(sum<0)
12                break;
13            else
14                System.out.println(a[i]);
15        }
16    }
17 }
18 }
```

Provide Custom Input

1  
2  
88  
-100  
49

Compile and Test Submit Code

00:48 26-09-2023

Hackerblocks

https://hack.codingblocks.com/app/contests/4475/201/problem

Learn Practice Get Hired IDE

Hi, somya.gu pta\_cs22

Dashboard Daily Code Contests Practice Complete

[...] Code Editor Java 8

```
1 import java.util.*;
2 public class Main {
3     public static void main(String args[]) {
4         Scanner input=new Scanner (System.in);
5         int n=input.nextInt();
6         int x=input.nextInt();
7         int sol=0;
8         for(int i=1;i<=n;i++){
9             sol=(3*i)+2;
10            if(sol%x==0){
11                n++;
12            }
13            else{
14                System.out.println(sol);
15            }
16        }
17    }
18 }
```

Provide Custom Input

10  
4

Compile and Test Submit Code

Hackerblocks

https://hack.codingblocks.com/app/contests/4475/161/problem

Learn Practice Get Hired IDE

Hi, somya.gu pta\_cs22

Dashboard Daily Code Contests Practice Complete

[...] Code Editor Java 8

```
4 Scanner input=new Scanner(System.in);
5 long n=input.nextLong();
6 long ans=0;
7 if(n==0)
8     ans=5;
9 long mul=1;
10 while(n!=0){
11     long rem=n%10;
12     if(rem==0){
13         long k=rem+5;
14         ans=ans+k*mul;
15     }
16     else{
17         ans=ans+rem*mul;
18     }
19     mul*=10;
20     n=n/10;
21 }
22 System.out.println(ans);
23 }
24 }
```

Provide Custom Input

102

Compile and Test Submit Code

Hackerblocks

https://hack.codingblocks.com/app/contests/4475/100/problem

Learn Practice Get Hired IDE

Hi, somyagu pta\_cs22

Dashboard Daily Code Contests Practice Compete

[...] Code Editor Java 8

```
1 import java.util.*;
2 public class Main {
3     public static void main(String args[]) {
4         Scanner input=new Scanner (System.in);
5         int n=input.nextInt();
6         int rev,rev=0;
7         while(n>0){
8             rem=n%10;
9             rev=rev*10+rem;
10            n=n/10;
11        }
12        System.out.println(rev);
13    }
14 }
15
```

Provide Custom Input

Compile and Test Submit Code

123456789

Hackerblocks

https://hack.codingblocks.com/app/contests/4475/64/problem

Learn Practice Get Hired IDE

Hi, somyagu pta\_cs22

Dashboard Daily Code Contests Practice Compete

[...] Code Editor Java 8

```
1 import java.util.*;
2 public class Main {
3     public static void main(String args[]){
4         Scanner input=new Scanner (System.in);
5         int d=input.nextInt();
6         int n=input.nextInt();
7         check(d,n);
8     }
9     private static void check(int d,int n){
10        int rem,count=0;
11        while(d>0){
12            rem=d%10;
13            if(rem==n){
14                count++;
15            }
16            d=d/10;
17        }
18        System.out.println(count);
19    }
20 }
21
```

Provide Custom Input

Compile and Test Submit Code

5433231  
3