

1. Write a program to print the special characters separately and print number of Special characters in the line?

```
class HelloWorld {  
    public static void main(String[] args) {  
        String s=input.nextLine();  
        int len=s.length();  
        char a[]=new char[len];  
        int sp=0;  
        for(int i=0;i<len;i++)  
        {  
            a[i]=s.charAt(i);  
            if(a[i]>=65 && a[i]<=90 || a[i]>=97 &&a[i]<=122  
            || a[i]>=48 && a[i]<=57)  
            {  
            }  
            else  
            {  
                sp++;  
                System.out.print(a[i]);  
            }  
        }  
        System.out.println("¥n"+sp);  
    }  
}
```

output:

```
java -cp /tmp/fDW6n4q4gn/HelloWorld
@
1

=== Code Execution Successful ===
```

2. Write a program to print all the composite numbers between a and b?

Sample Input:

A = 12

B = 19

Sample Output

14, 15, 16, 18

```
class HelloWorld {
    public static void main(String[] args) {

        int a=12;
        int b=19;
        for(int i=a+1;i<=b;i++)
        {
            int c=0;
            for(int j=1;j<=b;j++)
            {
                if(i%j==0)
                c++;
            }
            if(c>2)
                System.out.print(i+" ");
        }
    }
}
```

```
    }  
}
```

output:

14, 15, 16, 18

3. Write a program to print the Inverted Full Pyramid pattern?

```
lass HelloWorld {  
    public static void main(String[] args) {  
  
int n=5;  
for(int i=n;i>=1;i--)  
{  
    for(int j=0;j<n-i;j++)  
    {  
        System.out.print(" ");  
    }  
    for(int k=1;k<=i;k++)  
    {  
        System.out.print(" *");  
    }  
    System.out.println();  
}  
    }  
}
```

output:

```
java -cp /tmp/WroCmmC9sG/hello
* * * * *
* * * *
* * *
* *
*

=== Code Execution Successful ===
```

4.Find the Mean, Median, Mode of the array of numbers?

Sample Input;:

Array of elements = {16, 18, 27, 16, 23, 21, 19}

```
class HelloWorld {
    public static void main(String[] args) {
```

```
int a[]={16,18,27,16,23,21,19};
```

```
int len=a.length;
```

```
int sum=0;
```

```
for(int i=0;i<len;i++)
```

```
{
```

```
    sum=sum+a[i];
```

```
}
```

```
int mean=sum/len;
```

```
System.out.println("mean: "+mean);
```

```
for(int i=0;i<len;i++)
```

```
{
```

```
    for(int j=i+1;j<len;j++)
```

```
    {
```

```
        if(a[i]>a[j])
```

```
        {
```

```
            int temp=a[i];
```

```
a[i]=a[j];
a[j]=temp;
}
}
}
for(int i=0;i<len;i++)
{
    if(len%2==0)
    {
        int mid=len/2;
        System.out.print("median: "+a[mid-1]);
        break;
    }
    else
    {
        int mid=(len+1)/2;
        System.out.print(mid);
        System.out.println("median: "+a[mid-1]);
        break;
    }
}
for(int i=0;i<len;i++)
{
    for(int j=i+1;j<len;j++)
    {
        if(a[i]==a[j])
        {
            System.out.println("mode: "+a[i]);
```

```
break;

}}

}

}
```

output:

Mean = 20

Median = 19

Mode = 16

5.Find the factorial of n?

Sample Input:

N = 4

```
class HelloWorld {

    public static void main(String[] args) {

int n=6;

    int fact=1;

    for(int i=1;i<=n;i++)

    {

        fact=fact*i;

    }

    System.out.print(fact);

    }

}
```

output:

```
java -cp /tmp/tgQuS1t5ZS/HelloWorld
720
=== Code Execution Successful ===
```

