CS163/164 – Strings and Wrapper Classes

For the activities below, write your solution in English first, think about each step that needs to be done and after that you can transform your solution to Java code.

Consider that the following methods will be build in a class that has the main method.

1. Write a method that receives a String and build a new String containing only the characters that are letters.
2. Write a method that receives a String, build a new String containing all characters that are digits, transforms and return that String into a long.
3. Write a method that receives a String and a char and returns the number of times that the char appears in the String.
4. Write one call for each method that you developed in your main method.

public class WorksheetWeek5StringWrapper {  
 public static void main(String args[]){  
 String strNew = *activity1*("a#b1c d e");  
 if(!strNew.equals("")){  
 System.*out*.println(strNew);  
 }  
 else System.*out*.println("String does not contains letters!");  
 System.*out*.println(*activity2*("1a2s3d4"));  
 String msg = "abdaabd";  
 char c = 'a';  
 int count = *activity3*(msg, c);  
 if(count == 0)  
 System.*out*.printf("%c does not happen in %s\n",c, msg );  
 else System.out.printf("%c appears %d times in %s\n",c,count, msg);  
 }  
  
 public static String activity1(String str) {  
 String ret = "";  
 for (int i = 0; i < str.length(); i++) {  
 char c = str.charAt(i);  
 if (Character.isLetter(c)) {  
 ret += c;  
 }  
 }  
 return ret;  
 }  
 public static long activity2(String str){  
 String ret = "";  
 for(int i = 0; i < str.length(); i++){  
 char c = str.charAt(i);  
 if(Character.isDigit(c))  
 ret+=c;  
 }  
 if(ret.equals("")) return 0;  
 else return Long.parseLong(ret);  
 }  
  
 public static int activity3(String str, int c){  
 int count = 0;  
 for(int i = 0; i < str.length(); i++) {  
 char cs = str.charAt(i);  
 if(cs == c) count++;  
 }  
 return count;  
 }  
}