Set 4

1. Write a Java program that reverses the digits of a given integer. Use a while loop to

extract each digit and build the reversed number

import java.util.\*;  
public class Main {  
 public static void main(String[] args) {  
 int no = 123;  
 int reversed = 0;  
 while(no>0){  
 int digit = no%10;  
 reversed = reversed\*10+digit;  
 no = no/10;  
 }  
 System.*out*.println(reversed);  
 }  
}

2. . Create a method that checks if a given String is a palindrome (reads the same forwards and backwards).

import java.util.\*;  
public class Main {  
 public static void main(String[] args) {  
 String str1 = "aba";  
 System.*out*.println(*string\_palindrome*(str1));  
  
  
 }  
  
 public static String string\_palindrome(String str){  
 String reversed = "";  
 for(int i = str.length()-1; i>=0;i--){  
 reversed += str.charAt(i);  
 }  
 if(str.equals(reversed)){  
 return "palindrome";  
 }  
 else {  
 return "not palindrome";  
 }  
  
 }  
}

3. Write a program that counts the number of vowels and consonants in a given String

import java.util.\*;  
public class Main {  
 public static void main(String[] args) {  
 String str1 = "aba";  
 *conandalpha*(str1);  
  
  
 }  
  
 public static void conandalpha(String str){  
 int vowel = 0;  
 int conso = 0;  
 for(char ch : str.toCharArray()){  
 if(*isvowel*(ch)){  
 vowel++;  
 }  
 else{  
 conso++;  
 }  
 }  
 System.*out*.println("vowel "+vowel);  
 System.*out*.println("consonent" + conso);  
 }  
  
 public static boolean isvowel(char c){  
 return "aeiou".indexOf(c) !=-1;  
 }  
}

4. 4. Implement a method that capitalizes the first letter of each word in a given String.

import java.util.\*;  
public class Main {  
 public static void main(String[] args) {  
 String str1 = "hello world java";  
 System.*out*.println(*first\_upper*(str1));  
  
  
 }  
  
 public static String first\_upper(String str){  
 String[] words = str.split("\\s+");  
 StringBuilder capital = new StringBuilder();  
  
 for(String word : words){  
 String capital\_word = word.substring(0,1).toUpperCase() + word.substring(1).toLowerCase();  
 capital.append(capital\_word).append(" ");  
 }  
  
 return capital.toString().trim();  
 }  
  
}

5. . Write a program that checks if a given number is even or odd (from original list).