1. (100 pts) For each piece of code below, give the output (that is, what will be displayed on the screen) of the code. If there is no output generated, you may write "none". If the code has error, you may write "error". If the code has infinite loop, you may write "infinite loop". The code segments are independent (that is, they do not effect each other).

   (a) (15 pts)
   ```java
   for (int i=5; i>0 & i!=3; i--) {
       System.out.println(i);
   }
   ```

   (b) (15 pts)
   ```java
   int a = 3, b = 6, c = 4, t;
   if (a > b & a > c) {
       t = a;
       a = c;
       c = t;
   } else if (b > a & b > c) {
       t = b;
       b = c;
       c = t;
   }
   System.out.println(a);
   System.out.println(b);
   System.out.println(c);
   ```

   (f) (15 pts)
   ```java
   for (int i=5; i>0; i--){
       System.out.println(i);
       i += 2;
   }
   ```
(c) (20 pts)
int i = 0;
while(i<5){
    int a = i < 3 ? i * i : i;
    System.out.println(a);
    i++;
}

(d) (20 pts)
int i = 1;
do {
    for (int j=0; j<i; j++)
        System.out.print(i);
    System.out.println();
    System.out.println();
    i++;
} while(i < 5);

(e) (15 pts)
for (int i=9; i>0; i-=2){
    if (i % 2 == 0)
        break;
}
System.out.println(i);