

Lab 7

1- Identify all the errors in the following repetition statement:

```
a- for (int i = 10; i > 0; i++){  
    x = y;  
    a = b;  
}
```

This logical error because it is infinite loop.

```
b- int sum = 0;  
   Scanner scanner = new Scanner(System.in);  
   do {  
       num = scanner.nextInt();  
       sum += num;  
   }until (sum > 10000);
```

This is syntactical error because do-until it is not a loop.

```
c- while (x < 1 && x > 10){  
    a = b;  
}
```

This logical error because the condition is always false.

```
d- while (a == b ) ;  
{  
    a = b;  
    x = y;  
}
```

Here is a logical error because it is infinite loop and a syntactical error because the first line end by semicolon.

2- write for, do-while, and while statements to compute the following sums and products.

```
a- int sum = 0;  
   for (int i = 1; i <= 100; i++){  
       sum += i;  
   }
```

```
int sum = 0;
int i = 1;
do {
    sum += i ;
    i++;
} while (i <= 100);
```

```
int sum = 0;
int i = 1;
while (i <= 100){
    sum += i ;
    i++;
}
```

```
b- int sum = 0;
for (int i = 1; i <= 10; i++){
    sum += 5 * i;
}
```

```
int sum = 0;
int i = 1;
do {
    sum += 5 * i ;
    i++;
} while (i <= 10);
```

```
int sum = 0;
int i = 1;
while (i <= 10){
    sum += 5 * i ;
    i++;
}
```