


```

    imul
    istore 1          ; result
    iload 0           ; n
    ldc 1
    isub
    istore 0          ; n
    goto Loop_begin_5
Loop_end_6:
    ldc "Result"      ; "Result"
    invokestatic fact/fact/writes(Ljava/lang/String;)V
    iload 1           ; result
    invokestatic fact/fact/write(I)V

```

Q2

Java Byte Code for the example for loop:

```

ldc 2
    istore 0          ; i
Loop_begin_3:
    iload 0           ; i
    ldc 4
    ldc 1
    iadd
    if_icmpge Loop_end_4
    iload 0           ; i
    invokestatic forTest/forTest/write(I)V
    iload 0           ; i
    ldc 1
    iadd
    istore 0          ; i
    goto Loop_begin_3
Loop_end_4:

```

Q3

The program prints the numbers 1 to 10. This is because the variable 'i' has a global scope within the program so the inner loops increments 'i' to 10, which also meets the condition for exiting the outer loop.

The Java Byte Code for the program:

```

ldc 1
    istore 0          ; i
Loop_begin_9:
    iload 0           ; i
    ldc 10
    ldc 1
    iadd
    if_icmpge Loop_end_10
    ldc 1
    istore 0          ; i
Loop_begin_12:
    iload 0           ; i
    ldc 10

```

```
ldc 1
iadd
if_icmpge Loop_end_13
iload 0          ; i
invokestatic for2/for2/write(I)V
iload 0          ; i
ldc 1
iadd
istore 0         ; i
goto Loop_begin_12
Loop_end_13:
iload 0          ; i
ldc 1
iadd
istore 0         ; i
goto Loop_begin_9
Loop_end_10:
```