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CSN-221 Assignment-2

mov r0,1 #variable i

.loopi:

mov r1,1 #variable j

mov r2,0 #counter

.loopj:

add r3,r2,1 #variable k

.loopk:

mul r4,r1,r1

mul r4,r4,r1

mul r5,r3,r3

mul r5,r5,r3

add r6,r4,r5

cmp r6,r0

add r3,r3,1

beq .adder

cmp 1,1

```
    beq .loopl
```

```
    .adder:
```

```
        add r2,r2,1
```

```
    .loopl:
```

```
        mul r7,r3,r3
```

```
        mul r7,r7,r3
```

```
        cmp r7,r0
```

```
        bgt .loopj
```

```
    mul r8,r2,r2
```

```
    mul r8,r8,r2
```

```
    add r2,r2,1
```

```
    cmp r8,r0
```

```
    bgt .loopi
```

```
    cmp r2,2
```

```
    beq .endprogram
```

```
    add r0,r0,1
```

```
.endprogram: mov r9,r0
```

Final output is stored in r9