

Assignment 2

Name: Ashish Ucheniya

Enroll. No.: 18114014

Batch: O1

```
mov r0 1
```

```
mov r1 0
```

```
mov r2 -1
```

```
mov r6 0
```

```
.loopl
```

```
    add r0 r0 1
```

```
    mov r6 0
```

```
    mov r1 0
```

```
    mov r2 -1
```

```
    b.loopj
```

```
.loopj
```

```
    add r1 r1 1
```

```
    mov r3 r1
```

```
    mul r3 r3 r3
```

```
    mul r3 r3 r1
```

```
    cmp r3 r0
```

```
    bgt .loopl
```

```
    mov r2 -1
```

```
    b .loopK
```

```
.loopK
```

```
    add r2 r2 1
```

```
mov r4 r2
mul r4 r4 r4
mul r4 r4 r2
add r5 r3 r4
cmp r5 r0
bgt .loopJ
beq .incCount
cmp r2 r1
beq .loopJ
b .loopK
```

```
.incCount
    add r6 r6 1
    cmp r6 2
    bgt .exit
    beq .exit
    b .loopJ
```

```
.exit
```

The final Ramanujan No. Will be stored into r0.