

**G. Satya Vamsi**

**18114024**

**01(CSE)**

*SimpleRisc Assembly Program*

mov R0 1

mov R1 0

mov R2 0

mov R3 0

while1:

add R1 R1 1

mul R4 R1 R1

mul R4 R4 R1

cmp R4 R0

mov R2 R1

blt .while2

add R0 R0 1

mov R1 0

mov R2 0

mov R3 0

```
mul R5 R0 R0
```

```
mul R5 R5 R0
```

```
.while1
```

```
while2:
```

```
add R2 R2 1
```

```
mul R6 R2 R2
```

```
mul R6 R6 R2
```

```
add R7 R4 R6
```

```
cmp R7 R5
```

```
beq .add_R3_1
```

```
cmp R3 2
```

```
beq .print_R0
```

```
cmp R6 R0
```

```
blt .while2
```

```
.while1
```

```
add_R3_1:
```

```
add R3 R3+1;
```