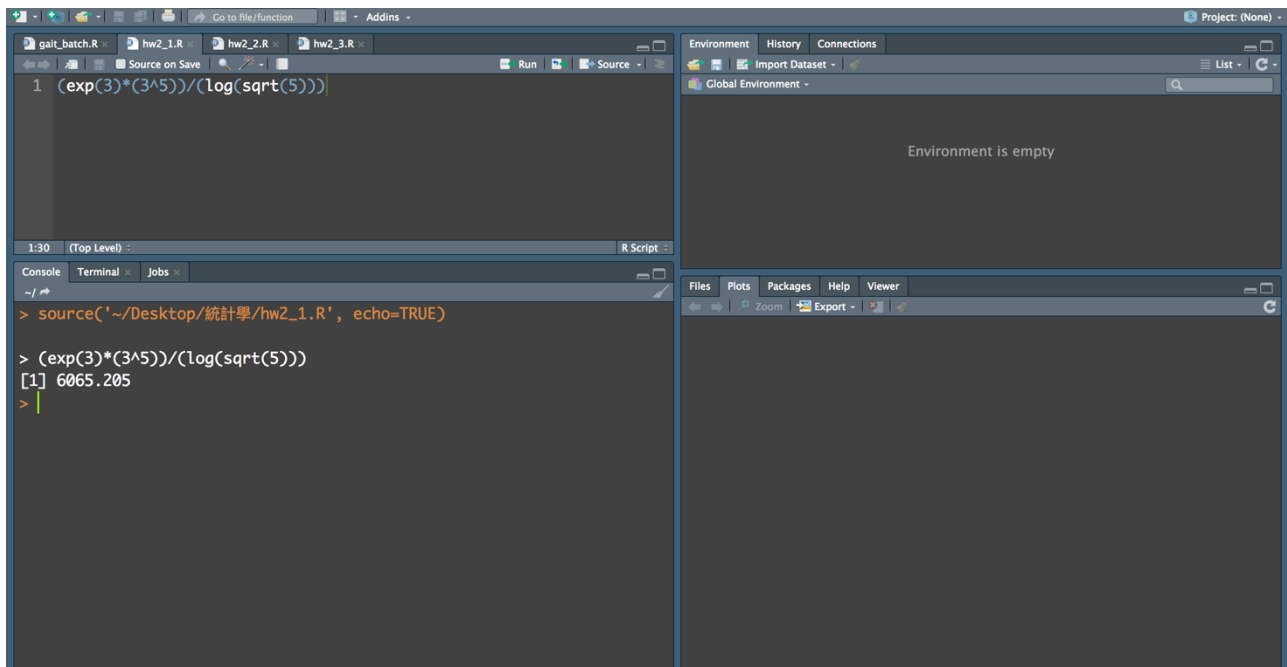


1. 請用 R 計算，須列出程式碼以及計算出的數值

$$\frac{e^3 3^5}{\ln(\sqrt{5})}$$



```
1 (exp(3)*(3^5))/(log(sqrt(5)))
```

```
> source('~\\Desktop\\統計學\\hw2_1.R', echo=TRUE)
```

```
> (exp(3)*(3^5))/(log(sqrt(5)))
```

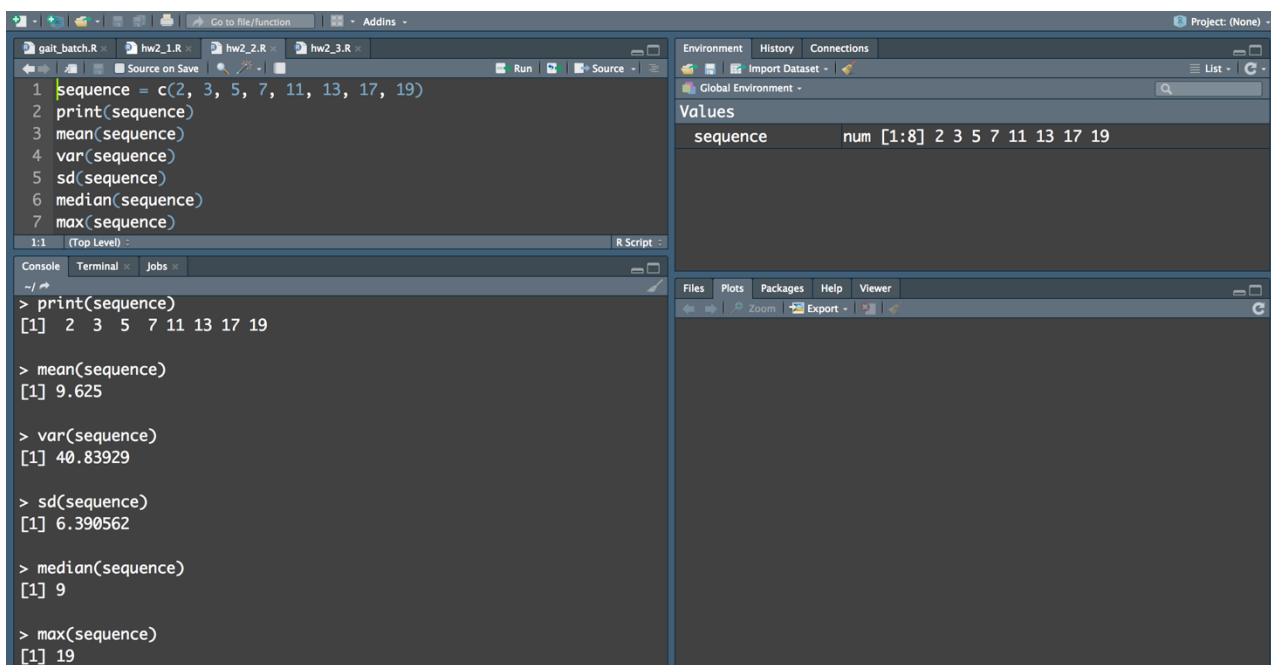
```
[1] 6065.205
```

2. 建立以下數字序列，並且計算摘要統計值

2, 3, 5, 7, 11, 13, 17, 19

- (1) 利用 c() 建立數列，並秀出數列結果

- (2) 計算此數列的平均值、變異數、標準差、中位數、最大值



```
1 sequence = c(2, 3, 5, 7, 11, 13, 17, 19)
```

```
2 print(sequence)
```

```
3 mean(sequence)
```

```
4 var(sequence)
```

```
5 sd(sequence)
```

```
6 median(sequence)
```

```
7 max(sequence)
```

```
1:1 (Top Level) :
```

```
> print(sequence)
```

```
[1] 2 3 5 7 11 13 17 19
```

```
> mean(sequence)
```

```
[1] 9.625
```

```
> var(sequence)
```

```
[1] 40.83929
```

```
> sd(sequence)
```

```
[1] 6.390562
```

```
> median(sequence)
```

```
[1] 9
```

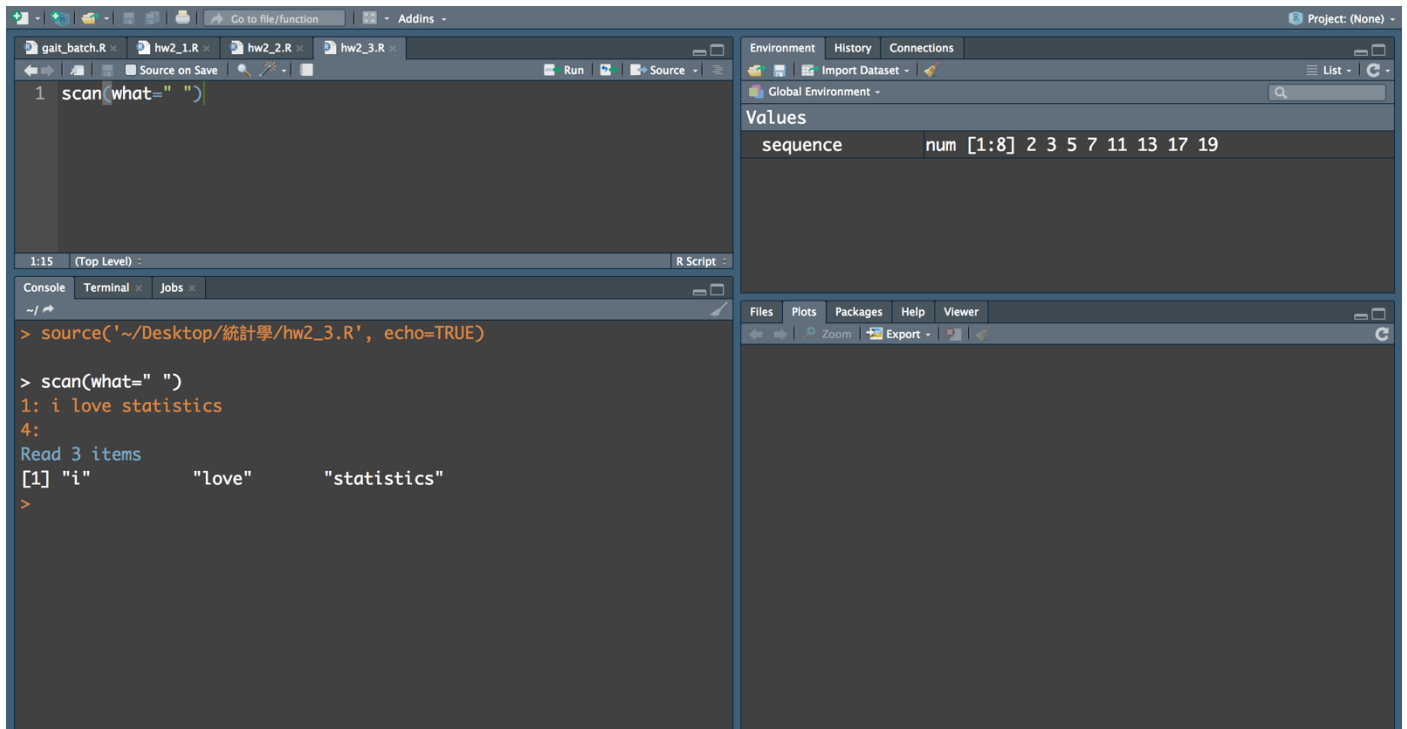
```
> max(sequence)
```

```
[1] 19
```

Values	
sequence	num [1:8] 2 3 5 7 11 13 17 19

3. 請利用 `scan(what=" ")`，建立以下文字向量，並秀出數列結果

i, love, statistics



The screenshot shows the RStudio environment with the following components:

- Source Editor:** Contains the R script `1 scan(what=" ")`.
- Console:** Shows the execution of the script. The output is:

```
> source('~/.Desktop/統計學/hw2_3.R', echo=TRUE)
> scan(what=" ")
1: i love statistics
4:
Read 3 items
[1] "i"      "love"   "statistics"
```
- Environment:** Displays the 'Global Environment' with a 'Values' table:

sequence	num
[1:8]	2 3 5 7 11 13 17 19
- Files:** Shows the project files, including `hw2_1.R`, `hw2_2.R`, and `hw2_3.R`.