**some basic commands and output:**

***Mathematical Functions:***

|  |  |  |  |
| --- | --- | --- | --- |
| **FUNCTION** |  | **INPUT** | **OUTPUT** |
| abs(x) | abs(-10) | 10 |
| log(x, base=y) | log(100, base=10) | 2 |
| exp(x) | exp(5) | 148.4132 |
| sqrt(x) | sqrt(25) | 5 |
| factorial(x) | factorial(3) | 6 |
| pi | pi | 3.141593 |

***Logical Functions:***

|  |  |  |  |
| --- | --- | --- | --- |
| **FUNCTION** |  | **INPUT** | **OUTPUT** |
| Greater than | 5>6 | FALSE |
| Less than | 4<5 | TRUE |
| Less than and Equal to | 12<=10 | FALSE |
| Greater than and Equal to | 19>=15 | TRUE |
| Equal to | 7==8 | FALSE |
| Not equal to | 13!=14 | TRUE |
| AND | 3 & 4 | TRUE |
| OR | 3 | 4 | TRUE |
| NOT | !3 | FALSE |

***Other Functions:***

|  |  |  |  |
| --- | --- | --- | --- |
| **FUNCTION** |  | **INPUT** | **OUTPUT** |
| Colon (:) | 1:6 | 1 2 3 4 5 6 |
| %in% | 5 %in% 6  5 %in% 5 | FALSE  TRUE |