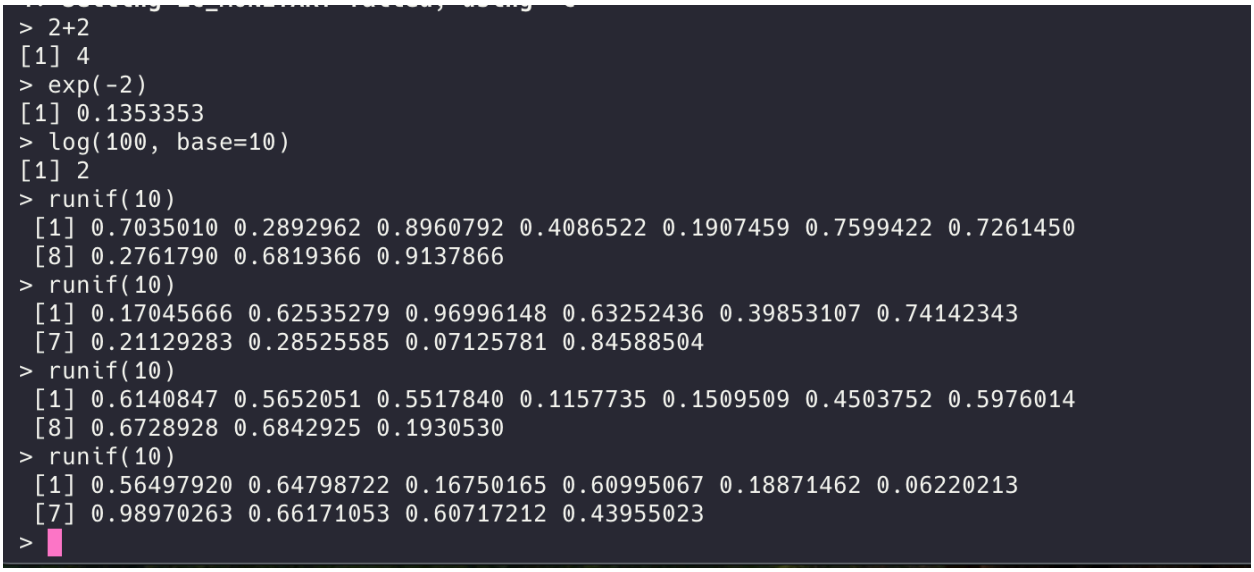
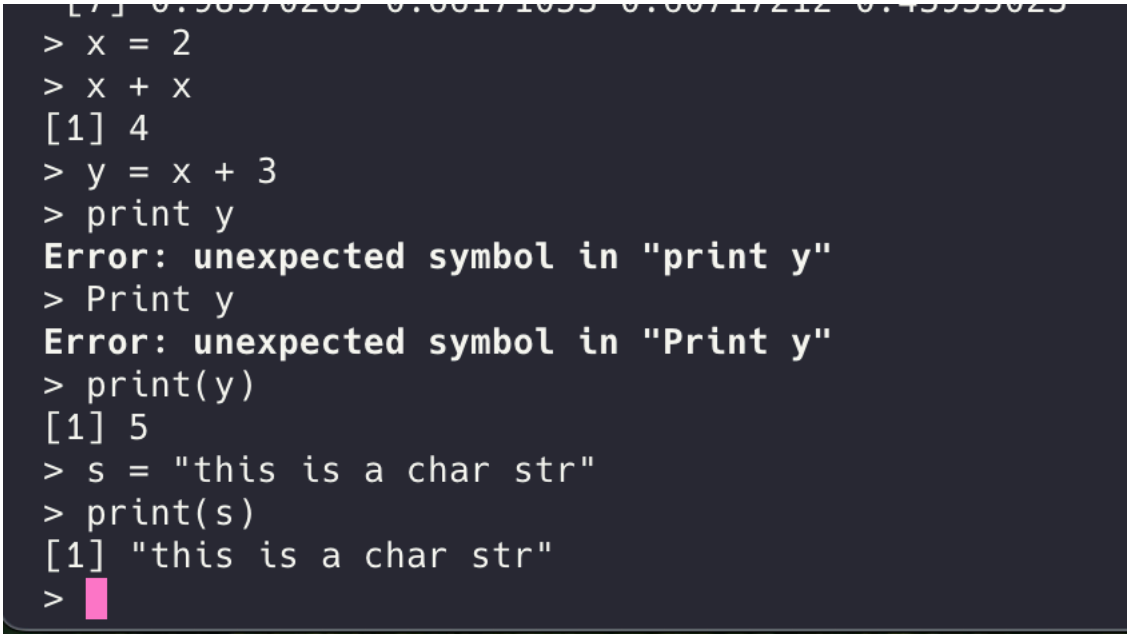
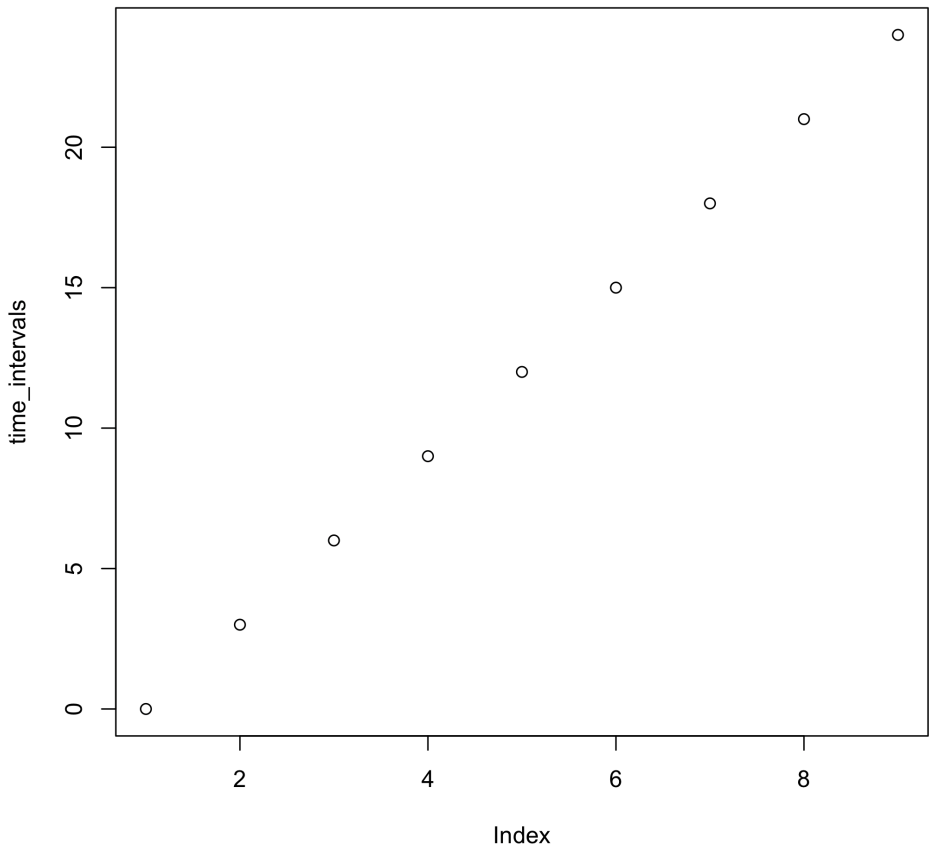
Activity 1


> 2+2
[1] 4
> exp(-2)
[1] 0.1353353
> log(100, base=10)
[1] 2
> runif(10)
 [1] 0.7035010 0.2892962 0.8960792 0.4086522 0.1907459 0.7599422 0.7261450
 [8] 0.2761790 0.6819366 0.9137866
> runif(10)
 [1] 0.17045666 0.62535279 0.96996148 0.63252436 0.39853107 0.74142343
 [7] 0.21129283 0.28525585 0.07125781 0.84588504
> runif(10)
 [1] 0.6140847 0.5652051 0.5517840 0.1157735 0.1509509 0.4503752 0.5976014
 [8] 0.6728928 0.6842925 0.1930530
> runif(10)
 [1] 0.56497920 0.64798722 0.16750165 0.60995067 0.18871462 0.06220213
 [7] 0.98970263 0.66171053 0.60717212 0.43955023
>

Activity 2


> x = 2
> x + x
[1] 4
> y = x + 3
> print y
Error: unexpected symbol in "print y"
> Print y
Error: unexpected symbol in "Print y"
> print(y)
[1] 5
> s = "this is a char str"
> print(s)
[1] "this is a char str"
>

Activity 3




```
> temperature = c(28, 29, 30, 31, 32)
> print(temperature)
[1] 28 29 30 31 32
> sales_Q1 = c(100, 150, 200)
> sales_Q2 = c(120,180,240)
> total_sales_Q1 <- sum(sales_Q1)
> total_sales_Q2 <- sum(sales_Q2)
> difference <= total_sales_Q1 - total_sales_Q2
Error: object 'difference' not found
> difference <- total_sales_Q1 - total_sales_Q2
> print(difference)
[1] -90
> grades <- c(85, 72, 90, 65, 88)
> print(grades[grades > 80])
[1] 85 90 88
> prices <- c(20, 30, 40, 50)
> time_intervals <- seq(0, 24, by = 3)
> plot(time_intervals)
> 2025-01-16 13:45:43.959 R[10076:61990] +[IMKClient subclass]: chose IMKClient_Modern
2025-01-16 13:45:43.959 R[10076:61990] +[IMKInputSession subclass]: chose IMKInputSession_Modern

> prices <- c(20, 30, 40, 50)
> prices(3) <- 35
Error in prices(3) <- 35 :
  target of assignment expands to non-language object
> prices[3] <- 35
> print(prices)
[1] 20 30 35 50
>
```

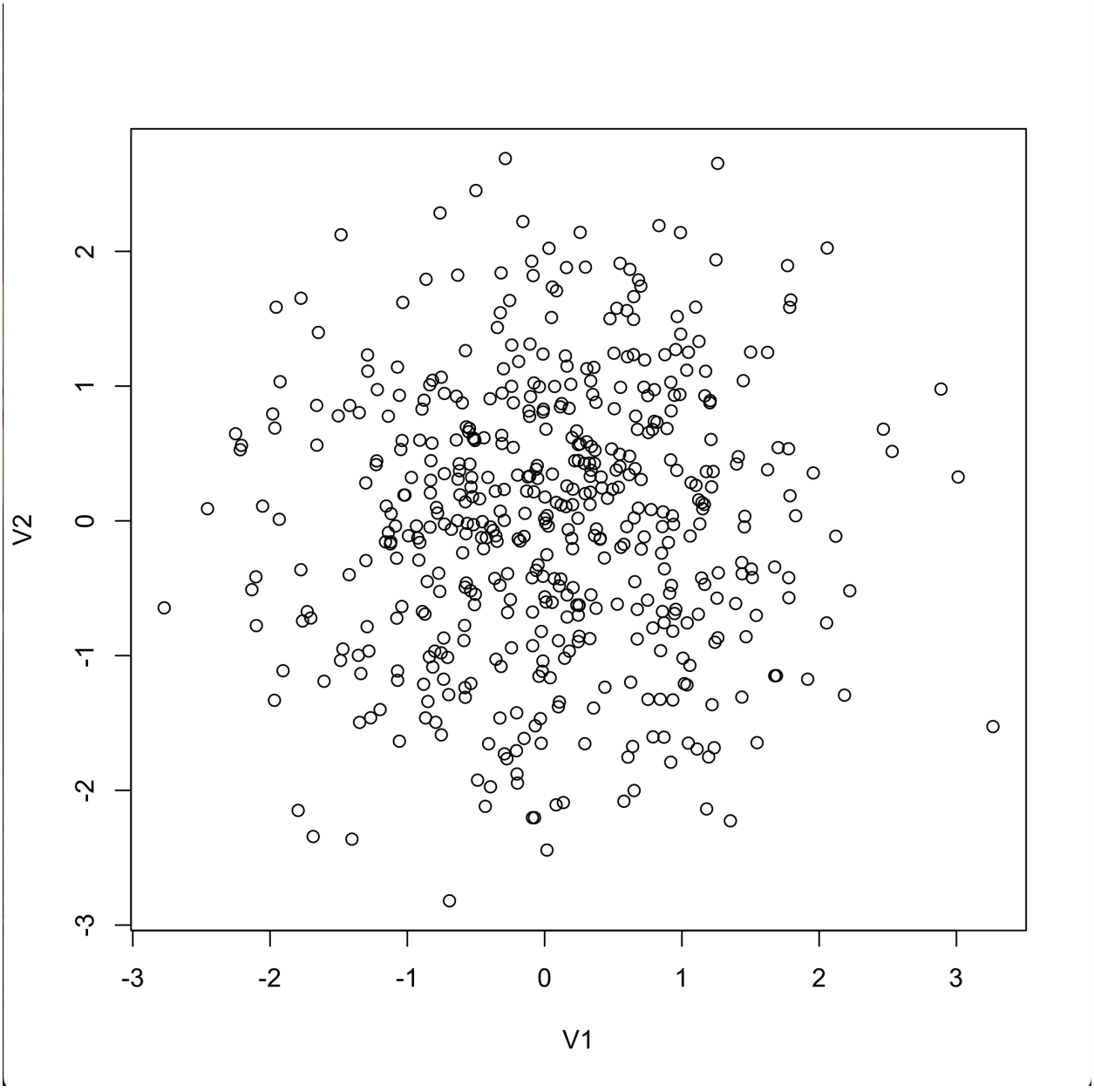
Activity 4

```
> x <- c(5,10,15,20)
> y<-c(1,2,3,4)
> print(x + y)
[1]  6 12 18 24
> print(x-y)
[1]  4  8 12 16
>  a <- c(2,4,6)
> b <- c(1,3,5)
> print(a*b)
[1]  2 12 30
> print(10c)
Error: unexpected symbol in "print(10c"
> print(10 * c)
Error in 10 * c : non-numeric argument to binary operator
> print(c * 10)
Error in c * 10 : non-numeric argument to binary operator
> d = c * 10
Error in c * 10 : non-numeric argument to binary operator
> c <- c(1,3,4,2)
> print(c*10)
[1] 10 30 40 20
> p <- c(100, 200, 300)
> q <- c(2, 4, 5)
> print(p/q)
[1] 50 50 60
> m <- c(10, 20, 30)
> n <- c(3, 5, 7)
> print(m %n)
Error: unexpected input in "print(m %n)"
> print(m %% n)
[1] 1 0 2
> v <- c(1, 2, 3, 4)
> print(v^4)
[1]   1  16  81 256
>
```

Activity 5

```
> data <- c(5, 10, 15, 20, 25, 30, 35)
> print(mean(data))
[1] 20
> data <- c(18, 22, 30, 40, 50)
> print(median(data))
[1] 30
> data <- c(5, 7, 10, 15, 20)
> print(sd(data))
[1] 6.107373
> data <- c(12, 18, 25, 30, 36)
> print(var(data))
[1] 90.2
> data <- c(3, 5, 7, 9, 11, 13, 15)
> print(quantile(data))
  0%  25%  50%  75% 100%
   3    6    9   12   15
> data <- c(100, 200, 300, 400, 500)
> dummary(data)
Error in dummary(data) : could not find function "dummary"
> summary(data)
   Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
    100     200     300     300     400     500
> data <- c(2, 4, 6, 8, 10, 12)
> print(IQR(data))
[1] 5
> data <- c(10, 20, 30, 40, 50, 60, 70)
> print(fivenum(data))
[1] 10 25 40 55 70
> data <- c(1, 2, 3, 4, 5, 6, 7, 8, 9, 10)
> print(list(data))
[[1]]
 [1]  1  2  3  4  5  6  7  8  9 10

> print(summery(data))
Error in summery(data) : could not find function "summery"
> print(summary(data))
   Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
   1.00    3.25    5.50    5.50    7.75   10.00
> data <- c(7, 8, 9, 10, 12, 14, 16)
> print(quantile(data, probs = c(0.25, 0.5, 0.75)))
 25%  50%  75%
 8.5 10.0 13.0
>
```

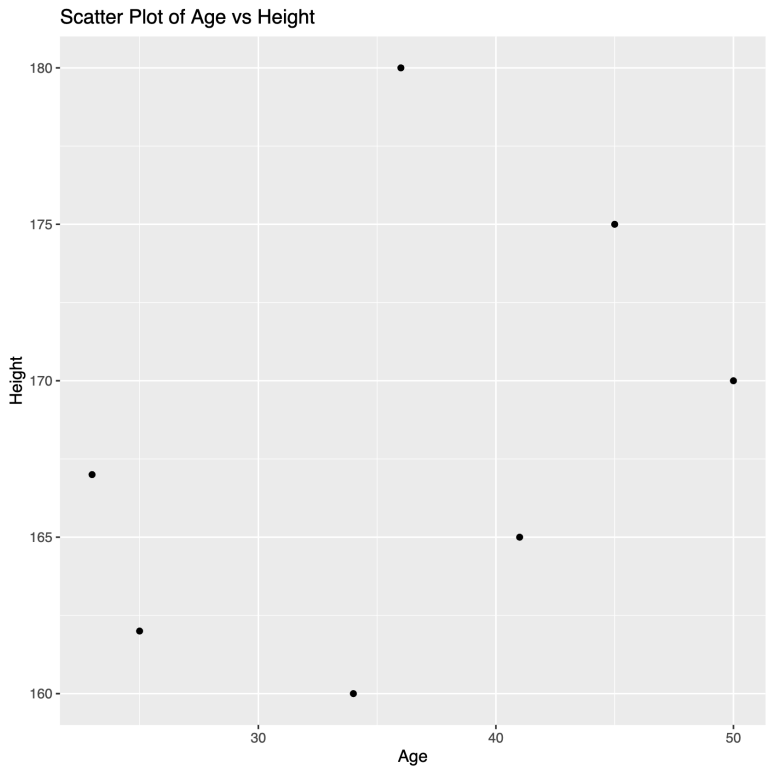
Activity 6

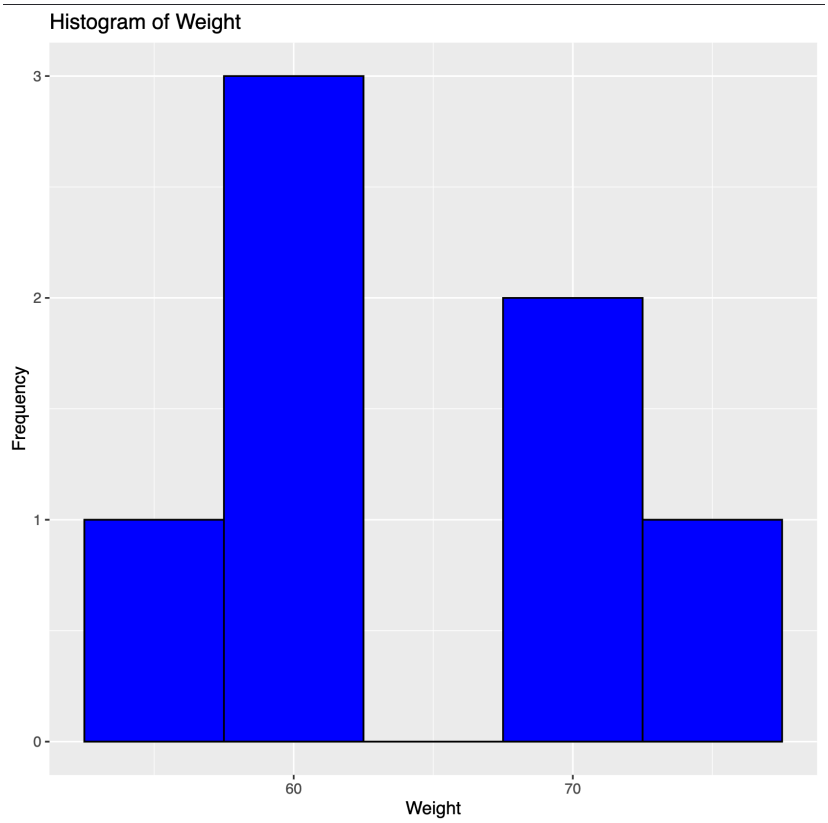


```
> data <- read.table("d1.txt")
> summary(data)
       V1                  V2
 Min.   :-2.77120   Min.   :-2.819800
 1st Qu.:-0.58403   1st Qu.:-0.688750
 Median : 0.03610   Median : 0.038650
 Mean   : 0.05106   Mean   : 0.003601
 3rd Qu.: 0.73395   3rd Qu.: 0.685400
 Max.   : 3.26620   Max.   : 2.689000
> plot(data)
> head(data$V1)
[1]  0.8706  0.3308 -1.3479  1.5479 -0.6166 -0.6986
>
```

Activity 7

```r
library(ggplot2)

data <- data.frame(
  Age = c(23, 45, 34, 25, 36, 50, 41),
  Height = c(167, 175, 160, 162, 180, 170, 165),
  Weight = c(55, 70, 60, 58, 75, 68, 62)
)

summary_stats <- summary(data)
print("Summary Statistics:")
print(summary_stats)

ggplot(data, aes(x = Age, y = Height)) +
  geom_point() +
  labs(title = "Scatter Plot of Age vs Height", x = "Age", y = "Height")

ggplot(data, aes(x = Weight)) +
  geom_histogram(binwidth = 5, fill = "blue", color = "black") +
  labs(title = "Histogram of Weight", x = "Weight", y = "Frequency")

```


Scatter Plot of Age vs Height
Height
180
175
170
165
160
30
40
50
Age


Histogram of Weight
Frequency
3
2
1
0
60
70
Weight