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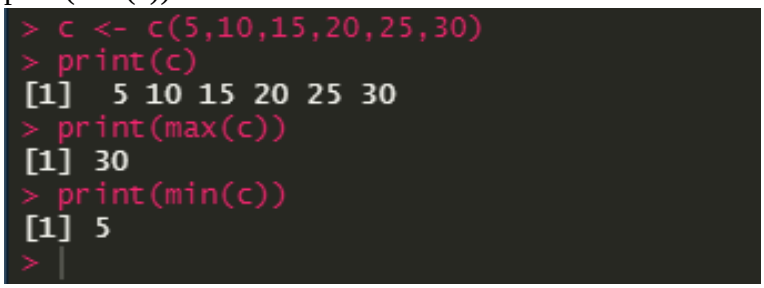
ASSIGNMENT 1

1.
```
c <- c(5,10,15,20,25,30)
print(c)
print(max(c))
print(min(c))
```


2.
```
n = as.integer(readline(prompt="Enter a number: "))
fact = 1
if(n < 0) {
  print("Negative number")
} else {
  for(i in 1:n) {
    fact = fact * i
  }
  print(fact)
}
```


3.
```
n = as.integer(readline(prompt="Enter a number: "))
if(n < 0) {
  print("Negative number")
} else {
  a=0
  b=1
  print(a)
  print(b)
  for(i in 1:(n-2)) {
    c=a+b
    a=b
    b=c
    print(c)
```

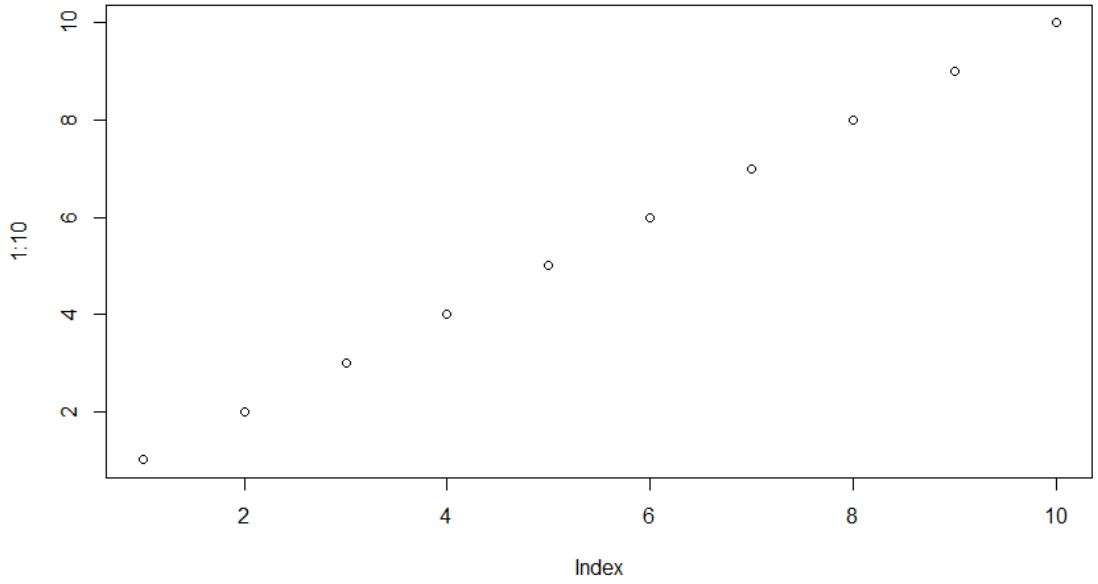
```
  }
}
```

```
Enter a number: 10
[1] 0
[1] 1
[1] 1
[1] 2
[1] 3
[1] 5
[1] 8
[1] 13
[1] 21
[1] 34
>
```

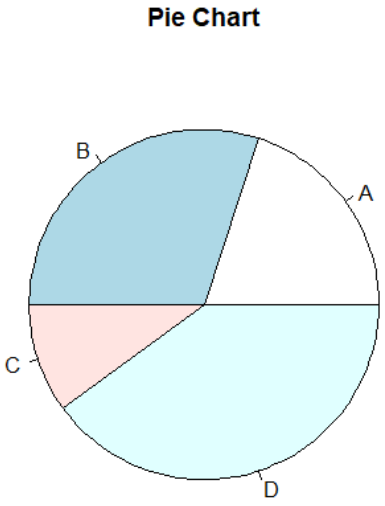
4.
```
add <- function(x, y) {
  return (x + y)
}
subtract <- function(x, y) {
  return (x - y)
}
multiply <- function(x, y) {
  return (x * y)
}
divide <- function(x, y) {
  return (x / y)
}
print("1.Add")
print("2.Subtract")
print("3.Multiply")
print("4.Divide")
c = as.integer(readline(prompt="Enter choice: "))
n1 = as.integer(readline(prompt="Enter first number: "))
n2 = as.integer(readline(prompt="Enter second number: "))
ans <- switch(
  c,
  '1' = add(n1,n2),
  '2' = subtract(n1,n2),
  '3' = multiply(n1,n2),
  '4' = divide(n1,n2)
)
print(ans)
```

```
[1] "1.Add"
[1] "2.Subtract"
[1] "3.Multiply"
[1] "4.Divide"
Enter choice: 4
Enter first number: 65
Enter second number: 13
[1] 5
>
```

5. plot(1:10)




```
x <- c(20, 30, 10, 40)
labels <- c("A", "B", "C", "D")
pie(x,labels,main = "Pie Chart")
```



```
data <- c(10,20,30,15,5,45,50)
barplot(data)
```