

## # Assignment 5

# 1 addition(a, b)

```
addition <- function(a,b) {  
  return(a+b)  
}
```

```
print(addition(5,3))  
# Output: 8
```

# 2 subtraction(a, b)

```
subtraction <- function(a,b) {  
  return(a-b)  
}
```

```
print(subtraction(8,3))  
# Output: 5
```

# 3 multiplication(a, b)

```
multiplication <- function(a,b) {  
  return(a*b)  
}
```

```
print(multiplication(4,3))  
# Output: 12
```

# 4 division(a, b)

```
division <- function(a,b) {  
  if(b==0)  
  {  
    return (0)  
  }  
  return(a/b)  
}
```

```
print(division(9,3))  
# Output: 3
```

# 5 simple\_interest(principal, rate, time)

```
simple_interest <- function(principal, rate, time) {  
  return ((principal * rate * time) / 100)  
}
```

```
print(simple_interest(1000, 5, 2))  
# Output: 100
```

# 6 compound\_interest(principal, rate, time, n)

```
compound_interest <- function(principal, rate, time, n) {  
  return (principal * (1 + rate / (n * 100))^(n * time) - principal)  
}
```

```
print(compound_interest(1000, 5, 2, 4))  
# Output: 104.0816
```

# 7 celsius\_to\_fahrenheit(celsius)

```
celsius_to_fahrenheit <- function(celsius) {  
  return ((celsius * 9/5) + 32)
```

```

}

print(celsius_to_fahrenheit(0))
# Output: 32

# 8 fahrenheit_to_celsius(fahrenheit)

fahrenheit_to_celsius <- function(fahrenheit) {
  return ((fahrenheit - 32) * 5/9)
}

print(fahrenheit_to_celsius(32))
# Output: 0

# 9 lbs_to_rs(lbs, rate_per_lb)

lbs_to_rs <- function(lbs, rate_per_lb) {
  return (lbs * rate_per_lb)
}

print(lbs_to_rs(10, 50))
# Output: 500

# 10 area_circle(radius)

area_circle <- function(radius) {
  return (pi * radius^2)
}

print(area_circle(7))
# Output: 153.938

# 11 perimeter_rectangle(length, width)

perimeter_rectangle <- function(length, width) {
  return (2 * (length + width))
}

print(perimeter_rectangle(5, 10))
# Output: 30

```