Functions Labwork

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Question 1

Functions are advantageous when performing a repeated task.They save time because a function can be created for the repeated task and only require the programmer to make an input.Functions make programming relatively simpler,faster and less tedious for programmers

Question 2

#Let x be the observed value,a the mean and b the standard deviation  
z\_score=function(x,a,b)  
{(x-a)/b  
 return((x-a)/b)  
}  
z\_score(25.77,23.54,2.442)

## [1] 0.9131859

Question 3

#Let m be the given number and n the prime number  
mfunc=function(m,n)  
 {(log(m)\*log10(m))/n\*\*(1/3)  
return((log(m)\*log10(m))/n\*\*(1/3))  
}  
mfunc(32,11)

## [1] 2.345548

round(mfunc(32,11),digits = 1)

## [1] 2.3

Question 4

sdmtcars <- vector("double", ncol(mtcars))   
 for (i in seq\_along(mtcars)) {   
 sdmtcars[[i]] <- sd(mtcars[[i]])   
 }  
sdmtcars

## [1] 6.0269481 1.7859216 123.9386938 68.5628685 0.5346787 0.9784574  
## [7] 1.7869432 0.5040161 0.4989909 0.7378041 1.6152000