EXPERIMENT NO : 01 (B)

Program 1)Create a calculator using with function and without function.

With function

CODE :

```
# functions
add<-function(a,b)
{
  return(a+b)
}

sub<-function(a,b)
{
  return(a-b)
}
mul<-function(a,b)
{
  return(a*b)
}
div<-function(a,b)
{
  return(a/b)
}
mod<-function(a,b)
{
  return(a%%b)
}
roundoff<-function(a,b)
{
  return(a%/%b)
}
```

```
ad=add(10,20)
dv=div(40,20)
sb=sub(50,40)
ro=roundoff(40,3)
ml=mul(49,3)
mo=mod(90,7)
print(paste("ADDITION is",ad))
print(paste("MULTIPLICATION is",ml))
print(paste("SUBTRACTION is",sb))
print(paste("DIVISON is",dv))
print(paste("ANS is",ro))
print(paste("MOD is",mo))
```

OUTPUT :

```
~/
> print(paste("ADDITION is",ad))
[1] "ADDITION is 30"
> print(paste("MULTIPLICATION is",ml))
[1] "MULTIPLICATION is 147"
> print(paste("SUBTRACTION is",sb))
[1] "SUBTRACTION is 10"
> print(paste("DIVISON is",dv))
[1] "DIVISON is 2"
> print(paste("ANS is",ro))
[1] "ANS is 13"
> print(paste("MOD is",mo))
[1] "MOD is 6"
>
```

Without function

CODE :

```
a1<-readline(prompt="num1:")
a1<-as.integer(a1)
a2<-readline(prompt="num2:")
a2<-as.integer(a2)

add=a1+a2
sub=a1-a2
mul=a1*a2
div=a1/a2
print(paste("ADDITION OF",a1,"and",a2,"is", add))
print(paste("SUBTRACTION of",a1,"and",a2,"is",sub))
print(paste("MULTIPLICATION of",a1,"and",a2,"is", mul))
print(paste("DIVISION of",a1,"and",a2,"is", div))
```

OUTPUT :

```
Console  Terminal  Jobs
~/
> a1<-readline(prompt="num1:")
num1:10
> a2<-readline(prompt="num2:")
num2:20
> a1<-as.integer(a1)
> a2<-as.integer(a2)
> add=a1+a2
> sub=a1-a2
> mul=a1*a2
> div=a1/a2
> print(paste("ADDITION OF",a1,"and",a2,"is", add))
[1] "ADDITION OF 10 and 20 is 30"
> print(paste("SUBTRACTION of",a1,"and",a2,"is",sub))
[1] "SUBTRACTION of 10 and 20 is -10"
> print(paste("MULTIPLICATION of",a1,"and",a2,"is", mul))
[1] "MULTIPLICATION of 10 and 20 is 200"
> print(paste("DIVISION of",a1,"and",a2,"is", div))
[1] "DIVISION of 10 and 20 is 0.5"
>
```

Program2) Take input as marks of 5 subject and display sum and average of all subjects.

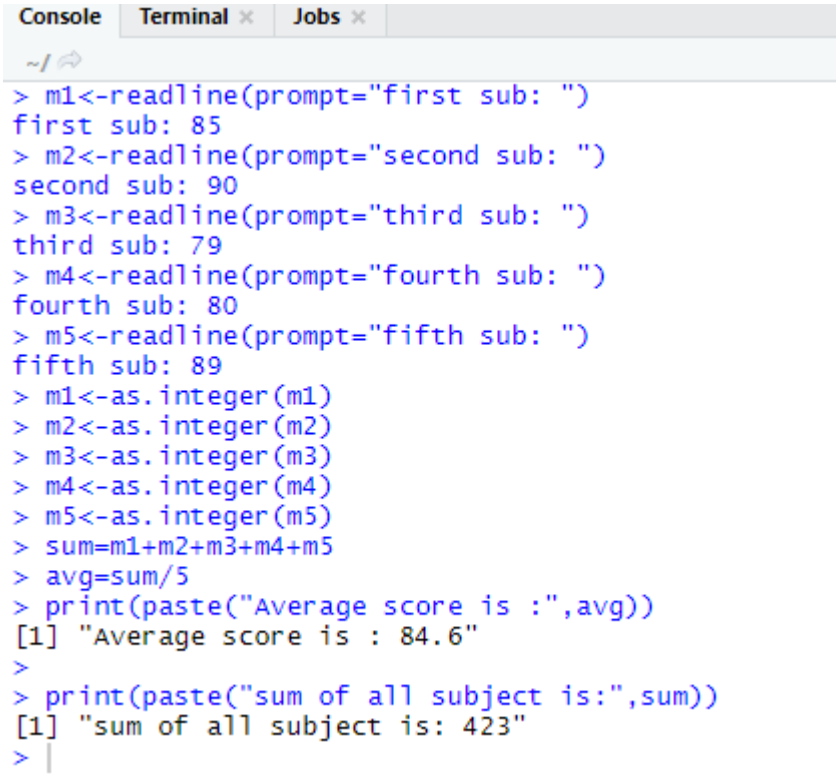
CODE :

```
m1<-readline(prompt="first sub: ")
m2<-readline(prompt="second sub: ")
m3<-readline(prompt="third sub: ")
m4<-readline(prompt="fourth sub: ")
m5<-readline(prompt="fifth sub: ")
m1<-as.integer(m1)
m2<-as.integer(m2)
m3<-as.integer(m3)
m4<-as.integer(m4)
m5<-as.integer(m5)

sum=m1+m2+m3+m4+m5
avg=sum/5
print(paste("Average score is :",avg))

print(paste("sum of all subject is:",sum))
```

OUTPUT :



CONCLUSION :HENCE SUCCESFULLY IMPLEMENTED CALCULATOR USING FUNCTION AND ITHOUT USING FUNCTION