#If user has not entered his name

if [ "$1" = "" ]

then

print "please enter your name"

read name

if [[ "$name" != "" ]]

then

print "welcome to the game of bowling $name"

fi

#If user has entered his name

else

print "welcome to the game of bowling $1"

fi

#Array Declarations

typeset -i a[12] #For first attempts

typeset -i b[12] #For Second attempts

typeset -i r[10] #For Results

#Gets the input for first 10 rounds

for i in 1 2 3 4 5 6 7 8 9 10

do

print "This is bowling attempt $i"

print "please enter your score in first attempt"

read a[$i]

if [[ ${a[$i]} -eq 10 ]]

then

b[$i]=0

else

print "please enter your score in second attempt"

read b[$i]

fi

done

#If the 10th round is strike

if [[ a[10] -eq 10 ]]

then

print "please enter your score in first attempt of 11th round"

read a[11]

#If first attempt of 11th round is a strike

if [[ a[11] -eq 10 ]]

then

#Get first attempt if 12th round

print "please enter your score in first attempt of 12th round "

read a[12]

else

#Get second attempt of 11th round if its first attempt is not a strike

print "please enter your score in second attempt of 11th round"

read b[11]

fi

#Else if 10th round is a spare

elif [[ a[10]+b[10] -eq 10 ]]

then

#Get the first attempt of 11th round

print "please enter your score in first attempt of 11th round"

read a[11]

fi

#Calculating the result

for i in 1 2 3 4 5 6 7 8 9 10

do

value=0

#If first attempt of the current round being computed is a strike

if [[ a[i] -eq 10 ]]

then

#If first attempt of the next round is a strike again

if [[ a[i+1] -eq 10 ]]

then

value=20+a[i+2]

else

#If first attempt if the next round is not a strike

value=10+a[i+1]+b[i+1]

fi

#If the current round is a spare

elif [[ a[i]+b[i] -eq 10 ]]

then

value=10+a[i+1]

#if the current round being computed is neither a strike nor a spare

else

value=a[i]+b[i]

fi

r[i]=value

done

#Printing the output of all 10 rounds

for i in 1 2 3 4 5 6 7 8 9 10 11 12

do

echo Round $i first attempt is ${a[$i]} and second attempt is ${b[$i]} Round $i Total is ${r[$i]}

done