# Program:

clear

student\_details()

{

echo ""

echo "Enter Student Details"

for(( i=0;i<$n;i++ ))

do

echo ""

echo -n "Reg No.: "

read regno[$i]

echo ""

echo "Enter Subject Grade Marks: "

echo -n "Maths: "

read maths[$i]

echo -n "Physics: "

read physics[$i]

echo -n "Chemistry: "

read chemistry[$i]

done

calculate

}

calculate()

{

for((i=0;i<n;i++))

do

total[$i]=$((${maths[$i]}+${physics[$i]}+${chemistry[$i]}))

avg[$i]=`expr ${total[$i]} / 3`

done

}

display()

{

echo ""

echo "-----------------------------Current Sorted Details--------------------------------------"

echo "-----------------------------------------------------------------------------------------"

echo "| Reg No. | Maths | Physics | Chemistry | Total | Average |"

echo "-----------------------------------------------------------------------------------------"

for(( i=0;i<$n;i++ ))

do

echo -n "| " ${regno[$i]} " | " ${maths[$i]} " | " ${physics[$i]} " | " ${chemistry[$i]} " | " ${total[$i]} " | " ${avg[$i]} " |"

echo ""

done

echo "-----------------------------------------------------------------------------------------"

}

sort()

{

clear

echo ""

echo ""

echo "--------------------------------------Sort Menu------------------------------------------"

select ch in RegNo Maths Physics Chemistry Total Average Exit

do

clear

case $ch in

RegNo)

regno

;;

Maths)

maths

;;

Chemistry)

chemistry

;;

Physics)

physics

;;

Total|Average)

total

;;

Exit)

break

;;

\*)

echo "Invalid Option! Try Again.."

esac

echo ""

echo ""

echo "--------------------------------------Sort Menu------------------------------------------"

echo "1) RegNo 3) Physics 5) Total 7) Exit"

echo "2) Maths 4) Chemistry 6) Average"

done

}

swap()

{

tem=${total[$1]}

total[$1]=${total[$2]}

total[$2]=$tem

tem=${avg[$1]}

avg[$1]=${avg[$2]}

avg[$2]=$tem

tem=${regno[$1]}

regno[$1]=${regno[$2]}

regno[$2]=$tem

tem=${maths[$1]}

maths[$1]=${maths[$2]}

maths[$2]=$tem

tem=${chemistry[$1]}

chemistry[$1]=${chemistry[$2]}

chemistry[$2]=$tem

tem=${physics[$1]}

physics[$1]=${physics[$2]}

physics[$2]=$tem

}

chemistry()

{

for(( i=0;i<n;i++ ))

do

for(( j=0;j<n;j++ ))

do

if [ ${chemistry[i]} -lt ${chemistry[j]} ]

then

swap $i $j

fi

done

done

display

}

regno()

{

for(( i=0;i<n;i++ ))

do

for(( j=0;j<n;j++ ))

do

if [ ${regno[i]} -lt ${regno[j]} ]

then

swap $i $j

fi

done

done

display

}

physics()

{

for(( i=0;i<n;i++ ))

do

for(( j=0;j<n;j++ ))

do

if [ ${physics[i]} -lt ${chemistry[j]} ]

then

swap $i $j

fi

done

done

display

}

total()

{

for(( i=0;i<n;i++ ))

do

for(( j=0;j<n;j++ ))

do

if [ ${total[i]} -lt ${total[j]} ]

then

swap $i $j

fi

done

done

display

}

maths()

{

for(( i=0;i<n;i++ ))

do

for(( j=0;j<n;j++ ))

do

if [ ${maths[i]} -lt ${maths[j]} ]

then

swap $i $j

fi

done

done

display

}

echo ""

echo "Enter Total Number of Students"

read n

student\_details

clear

echo ""

echo ""

echo "--------------------------------------Main Menu------------------------------------------"

select choice in Sort Display Exit

do

clear

case $choice in

Sort)

sort

;;

Display)

display

;;

Exit)

exit

;;

\*)

echo "Invalid Option!Try Again.."

;;

esac

echo ""

echo ""

echo "--------------------------------------Main Menu------------------------------------------"

echo "1) Sort"

echo "2) Display"

echo "3) Exit"

done

# Output:





