```
Algorithm:
/initailize the flags and set Previous_Sum =0

            //Get the x,y,z values of accelerometer.

                  v1 = sensorEvent.values[0];
                  v2 = sensorEvent.values[1];
                  v3 = sensorEvent.values[2];

            //Compute the sum

                  sum = v1 + v2 + v3;

                  if (sum < Previous_Sum) // When the Phone moves up
                        then Phone direction is UP
                  else if (sum > Previous_Sum) // When Phone goes down
                        then phone direction is DOWN

                  if (CurrentDirection is opposite to PreviousDirection)

                                    // Direction change
                  {
                        if (Phone is moving Down) {
                              Then get the last value when the phone was
                              moving Up from PreviousSum.

                              Set MovedUp

                        } else if (Phone is moving Up) {
                              Then get the last value when the phone was
                              moving Down from PreviousSum.

                              Set MovedDown
            }

                        if (MovedUp and MovedDown are Set ) {
            //Assuming the in a step your legs will move up and down


                  if (difference between extremes of UP and Down is greated
                  than  > DIFFERENCE) {

                        //Step has been taken
                              //Add the calorie Burnt by taking into account
      the Step length(Set to 20inches) ,the weight of the user(Entered when
      creating the profile)

                              }
                              Reset MovedUp and MovedDown
                        }
                  }
                  PreviousDirection = CurrentDirection;
                  Previous_Sum = sum;

            }
      }
```