```
clc
clear all

banyak_frame = 48; %baris = frame
banyak_pose  = 14; %ada 40 pose termasuk uji
banyak_sudut = 3;
banyak_sheet = 21;

%lokasi data dimasukan dalam variabel Lokasi dalam bentuk data string
for b=1:banyak_pose
    Lokasi{b} = "D:\TA\riset\Archery 24\Dipakai\Coordinate"+b+".xlsx";
end

%%
%membaca sema nama sheet pada data excel di Lokasi pertama
[~,nama_sheet]=xlsfinfo(Lokasi{1});

%expor nama bar
[alfabet] = 'd':'z';
expor_bar_sensor =[nama_sheet(:)];
expor_bar = ["pose" "total distance" "point"];

xlswrite('output1.xls',expor_bar,'Lembar1','A1');
for bagian=1:banyak_sheet
    xlswrite('output1.xls',expor_bar_sensor(bagian),'Lembar1',alfabet(bagian)+"1")
end

xlswrite('output2.xls',expor_bar,'Lembar1','A1');
for bagian=1:banyak_sheet
    xlswrite('output2.xls',expor_bar_sensor(bagian),'Lembar1',alfabet(bagian)+"1")
end

%%
%membaca data file pose
 for pose=1:banyak_pose
     lokasi = Lokasi{pose};
     %mencari lokasi skorr
     data_skor{pose} = xlsread(lokasi,nama_sheet{1},'D1');
     %"load pose ke "+pose
%     %mencari nilai mean dari tiap file
    for sheet=1:numel(nama_sheet)
        data{sheet}  = xlsread(lokasi,nama_sheet{sheet});

        %"load pose ke "+pose+" sheet "+nama_sheet{sheet}
        for kolom =1:banyak_sudut
            file{pose,sheet,kolom}  =  nanmean(data{sheet}(1:banyak_frame,kolom));
            dts1{pose,sheet,kolom} = data{sheet}(1,kolom);
            dts2{pose,sheet,kolom} = data{sheet}(48,kolom);
            %1:2 dari data 1 sampai 2, L = kolom ke L
            %"pose "+pose+", sheet "+sheet+", sumbu "+kolom
        end
        %"*done load pose ke "+pose+" sheet "+nama_sheet{sheet}
    end
    "*done!! load pose ke "+pose
 end
```

```
%%
%mencari nilai tertinggi dari data_skor
s = cell2mat(data_skor);
[val_skor idx_skor] = max(s);
%"nilai max "+val_skor+", pose ke "+idx_skor
%%
%mencari nilai distance
 for pose=1:banyak_pose %banyaknya pose sample
      %%
    pose
    %mencari nilai jarak manhattan setiap bagian/sumbu antara pose 1 dgn 2
    for sheet=1:numel(nama_sheet) %diulang sebanyak bagian badan / sheet (32 titik?)

        N=0; %N = |x1-xn| + |y1-yn| + |z1-zn|
        for sumbu =1:banyak_sudut
            jarak_antar_sumbu{sumbu}= abs(file{idx_skor,sheet,sumbu} - file{pose,↙
sheet,sumbu});
            % N = X + Y + Z

            N = N + jarak_antar_sumbu{sumbu};
        end

        jarak_antar_sheet{sheet} = N; % 1 dari 32 sheet (bagian sensor)
        ex_pose_sheet2{pose,sheet} = N;
        ex_pose_sheet1{pose,sheet} = N;
        ex_sheet{sheet} = N;
    end
    %%
    ex_sheet{1}=0;
    ex_pose_sheet2{pose,1} = 0;
    M=0;
    N=0; %tangan kiri + tangan kanan + ... + dst.
    for sheet =1:numel(nama_sheet) %banyaknya bagian / sensor
        N = N + jarak_antar_sheet{sheet};  %n normal
        M = M + ex_sheet{sheet}; %m setelah hips dibuat 0
    end
      %%
    %expor nilai pose , jarak , skor, ke excel.
    expor_nilai = [pose N data_skor{pose} ex_pose_sheet1(pose,:)]; %pose nilai_total↙
nilai_tembakan nilai_tiapbagian_tiappose
    letak_sheet = pose + 1;
    xlswrite('output1.xls',expor_nilai,'Lembar1',"A"+letak_sheet);

    expor_nilai2 = [pose M data_skor{pose} ex_pose_sheet2(pose,:)]; %pose nilai_total↙
nilai_tembakan nilai_tiapbagian_tiappose
    letak_sheet = pose + 1;
    xlswrite('output2.xls',expor_nilai2,'Lembar1',"A"+letak_sheet);

    expor_nilai3 = [pose file{pose,1:21,1:3}]; %pose nilai_total nilai_tembakan↙
nilai_tiapbagian_tiappose
    letak_sheet = pose + 1;
    xlswrite('output3.xls',expor_nilai3,'Lembar1',"A"+letak_sheet);
    %%
    %nilai seluruh bagian (tangan + kaki + ... )dimasukan dalam variabel jarak_pose
      jarak_pose{pose} = N; %nilai distance dimasukan ke array
```

```
      jarak_p{pose} = M; %hips = 0
    %%
    y = cell2mat(ex_sheet);
    y(1) = y(1)/1000;
    txt1 =[""+y];
    x = linspace(1,21,21); %harus banyaknya data alls (bagian badan)
    idmax = find(y == max(y));

    figure
    stem(x,y,'filled')
    text(x,y,txt1,'VerticalAlignment','bottom','HorizontalAlignment','center')
    xticks([1:21])
    xticklabels(nama_sheet)
    xtickangle(45)
    title("Graph setiap bagian pose "+pose)
end

%%
%
%     x1=cell2mat([dts1(idx_skor,:,1)]);
%     z1=cell2mat([dts1(idx_skor,:,2)]);
%     y1=cell2mat([dts1(idx_skor,:,3)]);
%     x2=cell2mat([dts2(idx_skor,:,1)]);
%     z2=cell2mat([dts2(idx_skor,:,2)]);
%     y2=cell2mat([dts2(idx_skor,:,3)]);
%
%     z1(13)=z1(13)+27;
%     z1(12)=z1(12)+10;
%     z1(9)=z1(9)-17;
%     z1(10)=z1(10)-34;
%     z1(11)=z1(11)-51;
%     z1(1)=z1(1)-68;
%     z1(2)=z1(2)-85;
%     z1(5)=z1(5)-85;
%     z1(3)=z1(3)-102;
%     z1(6)=z1(6)-102;
%     z1(4)=z1(4)-119;
%     z1(7)=z1(7)-119;
%
%     z2(13)=z2(13)+27;
%     z2(12)=z2(12)+10;
%     z2(9)=z2(9)-17;
%     z2(10)=z2(10)-34;
%     z2(11)=z2(11)-51;
%     z2(1)=z2(1)-68;
%     z2(2)=z2(2)-85;
%     z2(5)=z2(5)-85;
%     z2(3)=z2(3)-102;
%     z2(6)=z2(6)-102;
%     z2(4)=z2(4)-119;
%     z2(7)=z2(7)-119;
%
%
%     scatter3(x1,y1,z1,'o','filled')
%     line(x1(14:17),y1(14:17),z1(14:17))
```

```
%     line(x1(18:21),y1(18:21),z1(18:21))
%     line(x1(8:11),y1(8:11),z1(8:11))
%     line(x1(12:13),y1(12:13),z1(12:13))
%       txt = [nama_sheet];
%       text(x1,y1,z1,↙
txt,'VerticalAlignment','bottom','HorizontalAlignment','center','FontSize', 7)
%       title("Graph Pose "+idx_skor+" frame 1")
%
%     figure
%     scatter3(x2,y2,z2,'o','filled')
%     line(x2(14:17),y2(14:17),z2(14:17))
%     line(x2(18:21),y2(18:21),z2(18:21))
%     line(x2(8:11),y2(8:11),z2(8:11))
%     line(x2(12:13),y2(12:13),z2(12:13))
%      text(x2,y2,z2,↙
txt,'VerticalAlignment','bottom','HorizontalAlignment','center','FontSize', 7)
%     title("Graph Pose "+idx_skor+" frame 48")
%     xlabel('x')
%     ylabel('y')
%     zlabel('z')
% %%
pose
y = cell2mat(jarak_p(:));

figure
x = 1:pose; %sesuai banyaknya pose = banyak_pose = 3. untuk saat ini. %=====
txt2 =[" "+jarak_p];

stem(x,y,'k');
line(x,y);
text(x,y,txt2,'VerticalAlignment','bottom','HorizontalAlignment','right','FontSize',↙
8);
xticks([1:pose]); %====
xticklabels([x]);
title("Graph Pose.")

"done"
```