align = 150  
divider = (66 \* '-').center(align) # heading's settings  
divider2 = (30 \* '\*').center(align)  
  
# heading  
print(divider)  
print('student marks and rank updater'.title().center(align))  
print(divider)  
  
print('\n')  
  
# 3 lists  
names = ['manish', 'jayant', 'salman', 'john', 'sidhart', 'david']  
marks = [99, 74, 66, 34, 22, 18]  
rank = []  
  
  
def find\_index(new\_marks, marks, index):  
 # print(index)  
 for i in range(len(marks)):  
 if new\_marks[index] == marks[i]:  
 return i  
  
  
def replace\_values(new\_marks, marks):  
 for i in range(len(marks)):  
 new\_marks.append(marks[i])  
  
  
def max\_marks(names, new\_marks, marks):  
 n = new\_marks.index(max(new\_marks))  
 # print(marks.index(max(new\_marks)))  
 print((59 \* ' '), 'name:', names[find\_index(new\_marks, marks, n)], end='')  
 print('(' + str(new\_marks[n]) + ')')  
  
  
def display\_info(names, marks, rank, new\_marks):  
 print('Names\tMarks(out of 100)\t Rank'.center(align))  
 print('\n')  
 replace\_values(new\_marks, marks)  
 # print(marks)  
 new\_marks.sort(reverse=True)  
 # print(new\_marks)  
 # print(marks)  
 for i in range(len(names)):  
 n = find\_index(new\_marks, marks, i)  
 print((59 \* ' '), names[n], end='')  
 print('\t', new\_marks[i], '\t'.expandtabs(21), end='')  
 rank.append(i + 1)  
 print(rank[i])  
  
  
def update\_marks(names, marks):  
 print('Update Marks\n'.center(align))  
 print('Names\tUpdate Marks(out of 100)'.center(align))  
 print('\n')  
 i = 0  
  
 while (i < len(marks)):  
 print((59 \* ' '), names[i], '\t'.expandtabs(21), end='')  
 updated\_marks = int(input())  
 if (updated\_marks >= 0 and updated\_marks <= 100):  
 marks[i] = updated\_marks  
 i += 1  
 else:  
 print('\n')  
 print('!!! Invalid value!!!'.center(align))  
 print('!!! Enter value betweeen 0 and 100 !!!'.center(align))  
 continue  
  
  
flag = 1  
while (flag != 0):  
 # displaying options  
 print(divider2)  
 text = 'Select one option:\n '.center(align)  
 opt\_1 = '1) Display name, marks and rank'.center(152)  
 opt\_2 = '2) Update marks'.center(136)  
 opt\_3 = '3) Display name with max marks'.center(align)  
 # opt\_4 = '4) Rise/decline in rank (all students)'.center(158)  
 # opt\_5 = '5) Rise/decline in rank (by name)'.center(153)  
 opt\_4 = '4) Exit'.center(127)  
  
 # printing the display options  
 print(text)  
 print(opt\_1)  
 print(opt\_2)  
 print(opt\_3)  
 # print(opt\_4)  
 # print(opt\_5)  
 print(opt\_4)  
  
 print('\n')  
 a = input(70 \* ' ' + 'Option: ')  
 print('\n')  
  
 if (a == '1'):  
 new\_marks = []  
 update = marks  
 display\_info(names, marks, rank, new\_marks)  
  
 elif (a == '2'):  
  
 update\_marks(names, marks)  
 elif (a == '3'):  
 # print(new\_marks)  
 max\_marks(names, new\_marks, marks)  
 elif (a == 'exit' or a == 'Exit' or a == '4'):  
 flag = 0  
 else:  
 print('!!! Invalid option, Please select a valid option !!!'.center(align + 10))  
 print('\n')  
  
 print('\n')