Lab1Problem7.R

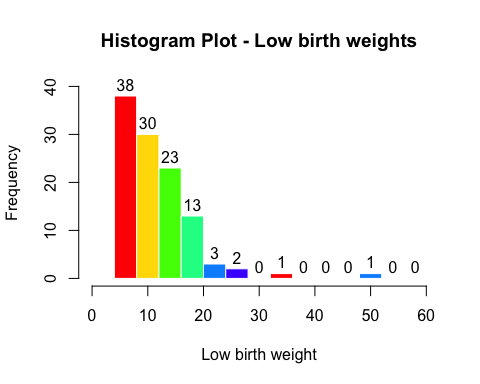
saint1729

2021-02-03

unicef.data <- read.table(file="unicef.txt", na.strings = ".", header=TRUE)  
unicef.data

## nation lowbwt life60 life92  
## 1 Afghanistan 20 33 43  
## 2 Albania 7 62 73  
## 3 Algeria 9 47 66  
## 4 Angola 19 33 46  
## 5 Argentina 8 65 71  
## 6 Armenia NA NA 72  
## 7 Australia 6 71 77  
## 8 Austria 6 69 76  
## 9 Azerbaijan NA NA 71  
## 10 Bangladesh 50 40 53  
## 11 Belarus NA NA 71  
## 12 Belgium 6 70 76  
## 13 Benin NA 35 46  
## 14 Bhutan NA 37 48  
## 15 Bolivia 12 43 61  
## 16 Botswana 8 46 61  
## 17 Brazil 11 55 66  
## 18 Bulgaria 6 68 72  
## 19 Burkina Faso 21 36 48  
## 20 Burundi NA 41 48  
## 21 Cambodia NA 42 51  
## 22 Cameroon 13 39 56  
## 23 Canada 6 71 77  
## 24 Central African Rep. 15 39 47  
## 25 Chad NA 35 47  
## 26 Chile 7 57 72  
## 27 China 9 47 71  
## 28 Colombia 10 57 69  
## 29 Congo 16 42 52  
## 30 Costa Rica 6 62 76  
## 31 Cote d'Ivoire 14 39 52  
## 32 Cuba 8 64 76  
## 33 Czech Rep. NA NA 72  
## 34 Denmark 6 72 76  
## 35 Dominican Rep. 16 52 67  
## 36 Ecuador 11 53 66  
## 37 Egypt 10 46 61  
## 38 El Salvador 11 50 66  
## 39 Eritrea NA NA 47  
## 40 Estonia NA 69 71  
## 41 Ethiopia 16 36 47  
## 42 Finland 4 68 76  
## 43 France 5 70 77  
## 44 Gabon NA 41 53  
## 45 Georgia NA NA 73  
## 46 Germany NA 70 76  
## 47 Ghana 17 45 56  
## 48 Greece 6 69 77  
## 49 Guatemala 14 46 64  
## 50 Guinea 21 34 44  
## 51 Guinea-Bissau 20 34 43  
## 52 Haiti 15 42 56  
## 53 Honduras 9 46 66  
## 54 Hong Kong 8 66 78  
## 55 Hungary 9 68 70  
## 56 India 33 44 60  
## 57 Indonesia 14 41 62  
## 58 Iran 9 50 67  
## 59 Iraq 15 48 66  
## 60 Ireland 4 70 75  
## 61 Israel 7 69 76  
## 62 Italy 5 69 77  
## 63 Jamaica 11 63 73  
## 64 Japan 6 68 79  
## 65 Jordan 7 47 68  
## 66 Kazakhstan NA NA 69  
## 67 Kenya 16 45 59  
## 68 Korea, Dem. NA 54 71  
## 69 Korea, Rep. 9 54 71  
## 70 Kuwait 7 60 75  
## 71 Kyrgyzstan NA NA 66  
## 72 Lao PDR 18 40 51  
## 73 Latvia NA 70 71  
## 74 Lebanon 10 60 68  
## 75 Lesotho 11 43 60  
## 76 Liberia NA 41 55  
## 77 Libyan Arab Jama. NA 47 63  
## 78 Lithuania NA 69 73  
## 79 Madagascar 10 41 55  
## 80 Malawi 20 38 44  
## 81 Malaysia 10 54 71  
## 82 Mali 17 35 46  
## 83 Mauritania 11 35 48  
## 84 Mauritius 9 59 70  
## 85 Mexico 12 57 70  
## 86 Moldova NA NA 68  
## 87 Mongolia 10 47 63  
## 88 Morocco 9 47 63  
## 89 Mozambique 20 37 47  
## 90 Myanmar 16 44 57  
## 91 Namibia 12 42 59  
## 92 Nepal NA 38 53  
## 93 Netherlands NA 73 77  
## 94 New Zealand 6 71 76  
## 95 Nicaragua 15 47 66  
## 96 Niger 15 35 46  
## 97 Nigeria 16 40 52  
## 98 Norway 4 73 77  
## 99 Oman 10 40 69  
## 100 Pakistan 25 43 59  
## 101 Panama 10 61 73  
## 102 Papua New Guinea 23 41 56  
## 103 Paraguay 8 64 67  
## 104 Peru 11 48 64  
## 105 Philippines 15 53 65  
## 106 Poland NA 67 72  
## 107 Portugal 5 63 75  
## 108 Romania 7 65 70  
## 109 Russian Fed. NA NA 69  
## 110 Rwanda 17 42 46  
## 111 Saudi Arabia 7 44 69  
## 112 Senegal 11 37 49  
## 113 Sierra Leone 17 32 43  
## 114 Singapore 7 64 74  
## 115 Slovakia NA NA 72  
## 116 Somalia 16 36 47  
## 117 South Africa NA 49 63  
## 118 Spain 4 69 77  
## 119 Sri Lanka 25 62 71  
## 120 Sudan 15 39 52  
## 121 Sweden 5 73 78  
## 122 Switzerland 5 71 78  
## 123 Syrian Arab Rep. 11 50 67  
## 124 Tanzania 14 41 51  
## 125 Thailand 13 52 69  
## 126 Togo 20 39 55  
## 127 Trinidad and Tobago 10 63 71  
## 128 Tunisia 8 48 68  
## 129 Turkey 8 50 67  
## 130 Turkmenistan NA NA 66  
## 131 USA 7 70 76  
## 132 Uganda NA 43 42  
## 133 Ukraine NA NA 70  
## 134 United Arab Emirates 7 53 71  
## 135 United Kingdom 7 71 76  
## 136 Uruguay 8 68 72  
## 137 Uzbekistan NA NA 69  
## 138 Venezuela 9 60 70  
## 139 Viet Nam 17 44 64  
## 140 Yemen 19 36 52  
## 141 Yugoslavia (former) NA 63 72  
## 142 Zaire 15 41 52  
## 143 Zambia 13 42 45  
## 144 Zimbabwe 14 45 56

# (a) Histogram and boxplot of low birth weight  
hist(unicef.data$lowbwt,  
 breaks=4+(0:14)\*4,  
 main = "Histogram Plot - Low birth weights",  
 xlab = "Low birth weight",  
 ylab = "Frequency",  
 border = FALSE,  
 labels = TRUE,  
 xlim = c(0, 60),  
 ylim = c(0, 40),  
 col = rainbow(7))



boxplot(unicef.data$lowbwt,  
 main = "Box Plot - Low birth weights",  
 xlab = "All nations",  
 ylab = "Low birth weights",  
 labels = TRUE,  
 boxwex = 0.3,  
 outline = TRUE,  
 outpch = 16,  
 outcol = "seagreen3",  
 las = 1,  
 notch = FALSE,  
 staplewex = 1,  
 col = "tomato")

