



```
1 #include <stdio.h>
2
3 int main (){
4     int R[6] = {353, 520, 690, 859, 1025, 1195};
5     int RRint [6];
6     float t;
7     float HR[5];
8     float sumHR;
9     float avgHR;
10
11     /*    RRint[0] = R[1] - R[0];
12     printf("R-R Interval = %d \n", RRint[0]);
13
14     t = RRint [0] / 128.0;          //.0 because MUST BE FLOAT
15     printf("t = %.2f \n", t);
16
17     HR=60/t;
18     printf("HR = %.2f bpm", HR);
19 */
20     //Looping
21
22     for(int i = 0; i < 5; i++){
23         RRint[i] = R[i+1] - R[i];
24         printf("R-R Interval = %d \n", RRint[i]);
25
26         t = RRint [i] / 128.0;
27         printf("t = %.2f \n", t);
28
29         HR[i]=60/t;
30         printf("HR = %.2f bpm \n", HR[i]);
31     }
32
33     //avg HR => HR += (60/t); [Advance Coding] its mean summing the HR value
34
35     for(int j = 0; j < 5; j++){        //Summing the HR values
36         sumHR = sumHR + HR[j];
37         // HR0+HR2 + HR[2]
38     }
39
40
41     avgHR = sumHR / 5; //average value of the HR
42     printf("Average HR = %.2f bpm \n", avgHR);
43
44     return 0;
45 }
46 }
```

C:\WINDOWS\system32\cmd.exe

Microsoft Windows [Version 10.0.17134.648]

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C:\Users\Debby&gt;cd C:\Users\Debby\Documents\Notepad\ECG

C:\Users\Debby\Documents\Notepad\ECG&gt;g++ HR.cpp -o a

C:\Users\Debby\Documents\Notepad\ECG&gt;a

R-R Interval = 167

t = 1.30

HR = 45.99 bpm

R-R Interval = 170

t = 1.33

HR = 45.18 bpm

R-R Interval = 169

t = 1.32

HR = 45.44 bpm

R-R Interval = 166

t = 1.30

HR = 46.27 bpm

R-R Interval = 170

t = 1.33

HR = 45.18 bpm

Average HR = 45.61 bpm

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