1.Problem Description: In this project i try to use if statements,while loops, random and scanner due to obligations that we need to make in this project. The problem is generally occurs due to users choices and i need to use to many if else to get over with this project. In short, project is like an interview that changes through users thoughts and types.

2.Problem Solution: After thinking nicely, using if, while and random perfectly, the problem becomes easier. The implementation part is easier that thinking. First to think nicely, i take an empty paper and write down all the possibilities nicely. Than, it is done.
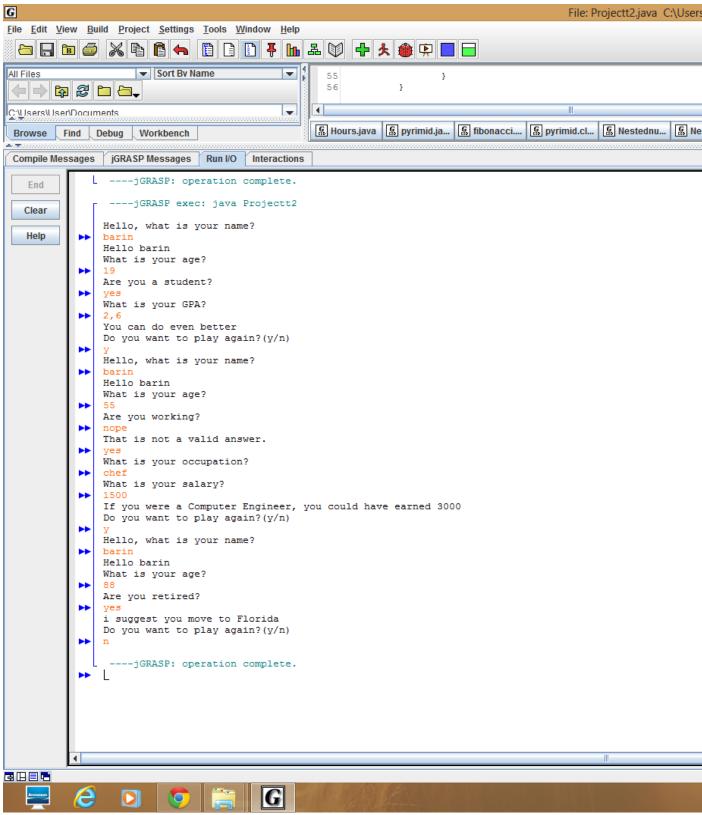
3.Implementation:

```java
 1 import java.util.*;          //so that i can use user's input on this program and
also it allows me to use random.
 2 public class Projectt2{         //Project's name.
 3   public static void main(String[] args){      //main class
 4     Scanner console= new Scanner(System.in);     //With import java.util.* and
this one we can use users inputs.
 5     Random rand=new Random();      //It is for using random answers.
 6       int a;      //I will need a variable in whole code, so i defined one
named a.
 7       String answer4=(" ");       //I defined a variable answer4 and use it in
down.
 8       while(answer4.equals("y")|| answer4.equals(" ")){  //by user's answer it
goes in while loop. If it is correct answer, it will go on, but if it is not, the
question will be asked again until it is true due to "while".
 9       System.out.println("Hello, what is your name?"); // asking a question.
10       String name=console.next();   //User's answer will be our "name"
variable.
11       System.out.println("Hello "+name);  //Hello + user's input.
12       System.out.println("What is your age?");
13       int age=console.nextInt(); //User's input will be our "age" variable.
14         if(age<=25){   //if age is under 25, the code will follow this road.
15           System.out.println("Are you a student?");
16           String answer=console.next();
17           while(!answer.equals("yes")&&!answer.equals("no")){  //if the
answer is not equal either yes or no the question will be asked again.
18             System.out.println("That is not a valid answer.");
19             answer=console.next();
20           }
21           if(answer.equals("yes")){  //after saying yes another road will
be folowed.
22             System.out.println("What is your GPA?");
23             double gpa=console.nextDouble(); //gpa will be defined by
user.
24             while(gpa<0 || gpa>4){  //if the gpa is not realistic like -
10 or 20, the the question will be asked again.
25               System.out.println("That is not a valid answer");
26               gpa=console.nextInt();
27             }
28             if(gpa<2){  //if it is under the 2.
29               a=rand.nextInt(3);   //our "a"variable will be useful
in here. So that i can use random method.
30                 if(a==0){
31                 System.out.println("Loser!");
```

```java
32                              }
33                              else if(a==1){
34                              System.out.println("Hope you are having fun");      //in
whole if(a==1)(a==0)... is randomly selected.
35                              }
36                              else{
37                              System.out.println("So,you are a failing student");
38                              }
39                      }
40                      else if(gpa<2.5){ //if it is between 2-2,5
41                          System.out.println("You need to work harder");
42                      }
43                      else{ //if it is between 2,5-4.
44                          a=rand.nextInt(2);    //again we use "a" variable and
change it, and use it for again random.
45                          if(a==0){
46                          System.out.println("Good job");
47                          }                                            //it is
again answer will be selected randomly.
48                          else{
49                          System.out.println("You can do even better");
50                          }
51                      }
52                  }
53              else{   //if the user says no, this sentence will be showned
and the program will ask do you want to play again.
54                  System.out.println("You should go to school.");
55              }
56          }
57          else if(age<=60){ //if age is between 25-60 this road will be
fallowed.
58              System.out.println("Are you working?");
59              String answer2=console.next();
60              while(!answer2.equals("yes")&&!answer2.equals("no")){    //again
the same processes with while loop.
61                  System.out.println("That is not a valid answer.");
62                  answer2=console.next();
63              }
64              if(answer2.equals("yes")){
65                  System.out.println("What is your occupation?");
66                  String occupation=console.next();      //i get occupation
from user to use it after.
67                  System.out.println("What is your salary?");
68                  int salary=console.nextInt();    //i get salary from user
to use it after again.
69
70                  if(!occupation.equals("teacher")&&
!occupation.equals("cook")&& !occupation.equals("driver")&&
!occupation.equals("computerengineer")&& !occupation.equals("journalist")){
71                      a=rand.nextInt(5);      //in #70 i am checking if the
user's occupation input and these 5 occupations are same or not. if not, so the
program will go to#71 to#87.
72                      if(a==0){
73                          System.out.println("If you were a cook, you could
have earned "+(salary*2));
74                      }
75                      else if(a==1){
76                          System.out.println("If you were a driver, you could
have earned "+(salary*2));
```

```java
77                              }
78                              else if(a==2){
79                                  System.out.println("If you were a Computer Engineer,
you could have earned "+(salary*2));    //these are all for picked random answers.
80                              }
81                              else if(a==3){
82                                  System.out.println("If you were a journalist, you
could have earned "+(salary*2));
83                              }
84                              else{
85                                  System.out.println("If you were a teacher, you could
have earned "+(salary*2));
86                              }
87                          }
88                      else{    //if the user's occupation and one of these 5
occupation are same, so user need an answer. i give it this one in #89.
89                              System.out.println("Have a good day :)");
90                          }
91                      }
92                  else{ //if the person do not have a job, so, the program will
print the sentence in down.
93                          System.out.println("You should find a job first.");
94                      }
95
96              }
97          else{ //if the user's age is over 60, this road is being fallowed.
98              System.out.println("Are you retired?");
99              String answer3=console.next();
100             while(!answer3.equals("yes")&&!answer3.equals("no")){
//same while processes.
101                 System.out.println("That is not a valid answer.");
102                 answer3=console.next();
103             }
104             if(answer3.equals("yes")){
105                 a=rand.nextInt(2);
106                 if(a==0){
107                     System.out.println("i suggest you move to Florida");
//if the user is retired, randomly to sentences will be printed.
108                 }
109                 else{
110                     System.out.println("i suggest you move to Antalya");
111                 }
112             }
113             else{
114                 System.out.println("You will be retired soon, hang
on");  //if not retired, the sentences will be like this.
115             }
116         }
117         System.out.println("Do you want to play again?(y/n)");    //after
all question are answered this one is shown up. If she says "y", the program will
be restarted, if not the program will be finished.
118         answer4=console.next();
119     while(!answer4.equals("y")&& !answer4.equals("n")){
120         System.out.println("That is not a valid answer."); //again the same
while process.
121         answer4=console.next();
122     }
123 }
```

```
124     }
125 }
```

4.Output Of The Program


```
                                                    File: Projectt2.java  C:\Users
File  Edit  View  Build  Project  Settings  Tools  Window  Help

All Files              ▼  Sort By Name          ▼      55                    }
                                                        56                    }
C:\Users\User\Documents                            ◄                        |||

Browse   Find   Debug   Workbench        Hours.java   pyrimid.ja...  fibonacci....  pyrimid.cl...  Nestednu...  Ne

Compile Messages   jGRASP Messages   Run I/O   Interactions

   End        └  ----jGRASP: operation complete.

   Clear         ┌ ----jGRASP exec: java Projectt2
   Help          │ Hello, what is your name?
            ►►   │ barin
                 │ Hello barin
                 │ What is your age?
            ►►   │ 19
                 │ Are you a student?
            ►►   │ yes
                 │ What is your GPA?
            ►►   │ 2,6
                 │ You can do even better
                 │ Do you want to play again?(y/n)
            ►►   │ y
                 │ Hello, what is your name?
            ►►   │ barin
                 │ Hello barin
                 │ What is your age?
            ►►   │ 55
                 │ Are you working?
            ►►   │ nope
                 │ That is not a valid answer.
            ►►   │ yes
                 │ What is your occupation?
            ►►   │ chef
                 │ What is your salary?
            ►►   │ 1500
                 │ If you were a Computer Engineer, you could have earned 3000
                 │ Do you want to play again?(y/n)
            ►►   │ y
                 │ Hello, what is your name?
            ►►   │ barin
                 │ Hello barin
                 │ What is your age?
            ►►   │ 88
                 │ Are you retired?
            ►►   │ yes
                 │ i suggest you move to Florida
                 │ Do you want to play again?(y/n)
            ►►   │ n

                 └ ----jGRASP: operation complete.
            ►►   └
```

5.Conclusion: With spending days on making it work correctly, i learn how to use if else statements, while loops, random at the end. Finally, there appears a program which works correctly.