# Assignment 1

Write a program that will capture your name and year of graduation into variables, and displays their values on the screen. Make sure that you capture the input from keyboard and use two variables. The variable that holds your name is the best datatype for such a variable, and that the variable that holds the year is the best datatype for that variable.

Also make sure that your variable names are good: the name of a variable should always relate to its contents.

**Output:**

Input your name: <some input>

Input your year of graduation: <some input>

My name is <your input> and I'll graduate in <your input>.

e.g.

My name is Prafful Daga and I'll graduate in 2020.

package com.cts.jan26;

import java.util.Scanner;

public class Graduation {

public static void main(String[] args) {

String studentName;

int yearOfGraduation;

Scanner scanner=new Scanner(System.in);

System.out.println("Enter your name:");

studentName=scanner.next();

System.out.println("Enter your year of graduation:");

yearOfGraduation =Integer.parseInt(scanner.next());

System.out.println("My name is "+studentName+". And I will graduate in "+yearOfGraduation+".");

}

}

# Assignment 2

Modify the above assignment to add some input validations.

1. Input your name: It must not allow numbers. Special characters are allowed.
2. Input your year of graduation: It must allow integers only. Floating point numbers and alphabets are not allowed.
3. If user makes invalid input, then program must not exit. It must prompt for the same input again; until user makes valid input.

package com.cts.jan26;

import java.util.Scanner;

public class Graduation1 {

public static void main(String[] args) {

String studentName;

int yearOfGraduation = 0;

Scanner scanner=new Scanner(System.in);

System.out.println("Enter your name:");

while(!scanner.hasNext("[A-Za-z.!@#$%^&\*]+"))

{

System.out.println("Please enter a valid name");

scanner.next();

}

studentName=scanner.next();

int c = 0;

do {

System.out.println("Enter your year of graduation:");

try

{

yearOfGraduation =Integer.parseInt(scanner.next());

c=0;

}

catch (NumberFormatException e)

{

System.out.println("Please enter a valid year");

c++;

}

}while(c!=0);

System.out.println(studentName);

System.out.println(yearOfGraduation);}

}

# Assignment 3

|  |
| --- |
| Write a code to implement quiz.   1. It must ask user if he/she wants to play the quiz. 2. It should ask the user three multiple-choice or true/false questions. You should create any 3 random questions. 3. It must keep track of correct answers, and print "score" at the end in terminal   import java.util.Scanner; |
|  |

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| --- |
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| --- |
| public class LittleQuiz { |
|  |

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| --- |
|  |
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|  |
| --- |
| public static void main(String[] args) { |
|  |

|  |
| --- |
| Scanner keyboard = new Scanner(System.in); |
|  |

|  |
| --- |
| int answer1, answer2, answer3, score = 0; |
|  |

|  |
| --- |
| System.out.print("Are you ready for a quiz? "); |
|  |

|  |
| --- |
| keyboard.next(); |
|  |

|  |
| --- |
| System.out.println("Okay, here it comes!"); |
|  |

|  |
| --- |
| System.out.println(); |
|  |

|  |
| --- |
| System.out.println("Q1) What is the capital of Alaska?"); |
|  |

|  |
| --- |
| System.out.println("\t1) Melbourne"); |
|  |

|  |
| --- |
| System.out.println("\t2) Anchorage"); |
|  |

|  |
| --- |
| System.out.println("\t3) Juneau"); |
|  |

|  |
| --- |
| System.out.println(); |
|  |

|  |
| --- |
| System.out.print("> "); |
|  |

|  |
| --- |
| answer1 = keyboard.nextInt(); |
|  |

|  |
| --- |
| System.out.println(); |
|  |

|  |
| --- |
| if (answer1 == 3) { |
|  |

|  |
| --- |
| System.out.println("That's right!"); |
|  |

|  |
| --- |
| score++; |
|  |

|  |
| --- |
| } else { |
|  |

|  |
| --- |
| System.out.println("Sorry, Juneau is the capital of Alaska."); |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| System.out.println(); |
|  |

|  |
| --- |
| System.out.println("Q2) Can you store the value \"cat\" in a variable of type int?"); |
|  |

|  |
| --- |
| System.out.println("\t1) yes"); |
|  |

|  |
| --- |
| System.out.println("\t2) no"); |
|  |

|  |
| --- |
| System.out.println(); |
|  |

|  |
| --- |
| System.out.print("> "); |
|  |

|  |
| --- |
| answer2 = keyboard.nextInt(); |
|  |

|  |
| --- |
| System.out.println(); |
|  |

|  |
| --- |
| if (answer2 == 2) { |
|  |

|  |
| --- |
| System.out.println("That's right!"); |
|  |

|  |
| --- |
| score++; |
|  |

|  |
| --- |
| } else { |
|  |

|  |
| --- |
| System.out.println("Sorry, \"cat\" is a string. ints can only store numbers."); |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| System.out.println(); |
|  |

|  |
| --- |
| System.out.println("Q3) What is the result of 9+6/3?"); |
|  |

|  |
| --- |
| System.out.println("\t1) 5"); |
|  |

|  |
| --- |
| System.out.println("\t2) 11"); |
|  |

|  |
| --- |
| System.out.println("\t3) 15/3"); |
|  |

|  |
| --- |
| System.out.println(); |
|  |

|  |
| --- |
| System.out.print("> "); |
|  |

|  |
| --- |
| answer3 = keyboard.nextInt(); |
|  |

|  |
| --- |
| System.out.println(); |
|  |

|  |
| --- |
| if (answer3 == 2) { |
|  |

|  |
| --- |
| System.out.println("That's correct!"); |
|  |

|  |
| --- |
| score++; |
|  |

|  |
| --- |
| } else { |
|  |

|  |
| --- |
| System.out.println("Sorry, 11 is the result."); |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| System.out.println(); |
|  |

|  |
| --- |
| System.out.println("Overall, you got " + score + " out of 3 correct."); |
|  |

|  |
| --- |
| System.out.println("Thanks for playing!"); |
|  |

|  |
| --- |
| } |
|  |

}