

BINUS University

Academic Career: <i>Undergraduate / Master / Doctoral *)</i>		Class Program: <i>International/Regular/Smart Program/Global Class*)</i>	
<input checked="" type="checkbox"/> Mid Exam <input type="checkbox"/> Final Exam <input type="checkbox"/> Short Term Exam <input type="checkbox"/> Others Exam : _____		Term : Odd/Even/Short *)	
<input checked="" type="checkbox"/> Kemanggisan <input checked="" type="checkbox"/> Alam Sutera <input type="checkbox"/> Bekasi <input type="checkbox"/> Senayan <input type="checkbox"/> Bandung <input type="checkbox"/> Malang		Academic Year : 2019 / 2020	
Faculty / Dept. : School of Computer Science		Deadline	Day / Date : Tuesday / 21 April 2020 Time : 13:00
Code - Course : COMP6175 - Object Oriented Programming		Class :	
Lecturer : Team		Exam Type : Online	
<i>*) Strikethrough the unnecessary items</i>			
<p style="text-align: center;"><i>The penalty for CHEATING is DROP OUT!!!</i></p>			

I. Case Study (100%)

One game in childhood is 'Snakes Ladders'. We will create a Java program that mimics this game. The technical conditions requested are as follows:

1. Snakes Ladders can be played by 2 or 3 players.
2. Create a menu with 3 choices; 1st is for 2 players, 2nd is for 3 players, and 3rd is to exit.
3. Snakes Ladders has 100 steps with numbers 1 to 100
4. The game is done in 25 rounds, where in each round each player will roll the dice which has 6 sides numbered 1 to 6.
5. For example, if A throws the dice which gives the side number 3 then A could go to the step number 3. In the next round, if the roll of the A produces the side of number 5 means that A goes to the step number 8.
6. If the throw of the dice produces a step > 100 , then the player has to return from step 100 by an excess of 100. For example the original step is 98 and the dice roll appears on the side 5 (to step 103), then the player must return to step 97 ($100-3$).
7. Bonuses / penalties that exist: reach step 13 then go back to step 7. For step 25 then go up to step 40. On step 50 go down again to step 38. On step 63 go up to step 78. On step 83 go up to step 97 and on step 95 go down to step 76 .
8. At each round, the outputs are the old/previous step from the player, dice roll, and a new step. For example for 2 players:

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Fidelson Tanzil (D5542) and sent to Program on Mar 30, 2020

Round	Player A			Player B			Player C		
	Old	Dice	New	Old	Dice	New	Old	Dice	New
1	10	4	14	8	5	7*			
2	14	2	16	7	4	11			
So on									

* to step 13 but go down to step 7

9. The game ends when one of the players reached step 100 or 25 rounds of looping is occurred.
10. At the end of the game, display the winning order based on the step number in descending order.
11. Display again the selection menu in point 2.

-- Good Luck --

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KETENTUAN PENGUMPULAN BERKAS JAWABAN UTS

Mahasiswa wajib mematuhi ketentuan pengumpulan berkas jawaban UTS berikut ini.

1. Pengumpulan (*submit*) jawaban ujian **tidak melalui BINUSMAYA**, melainkan melalui <http://exam.apps.binus.ac.id>. Akses menggunakan *username* dan *password login* BINUSMAYA.
2. Pastikan *file extension* dan *size file* sesuai ketentuan. File extension yang diperbolehkan adalah 'txt', 'pdf', 'ppt', 'xls', 'doc', 'pptx', 'xlsx', 'docx', 'rar', 'zip', 'jpg', 'jpeg', 'png', 'wav', 'mp3', 'mp4', 'avi', '3gp', 'mkv', 'mov', dan 'flv'. Maksimum *size file* yang diperbolehkan adalah 20 MB.
3. Jika *file* jawaban ujian akan dikumpulkan (*submit*) Mahasiswa berukuran lebih besar dari 20 MB (>20 MB), maka Mahasiswa harus melakukan:
 - a. Menyimpan *file* jawaban ujian pada *Cloud Storage*, seperti *Google Drive*, *Dropbox*, *OneDrive*, dan yang lainnya.
 - b. Membagikan tautan (*share link*) file jawaban ujian dan menyalin tautan (*link*) ke dalam Microsoft Word.
 - c. Mengunggah (*upload*) file Microsoft Word yang telah berisi tautan file jawaban ujian pada <http://exam.apps.binus.ac.id>.

STUDENT'S GUIDELINES FOR SUBMITTING MID EXAM ANSWER FILE

Students are obliged to follow the following guidelines for submitting mid exam answer file:

1. The answer file is **not to be submitted in BINUSMAYA**, but through the following link: <http://exam.apps.binus.ac.id>. Students can log in by using the username and password as in BINUSMAYA.
2. Please make sure to submit the answer file in one of the following accepted extensions: 'txt', 'pdf', 'ppt', 'xls', 'doc', 'pptx', 'xlsx', 'docx', 'rar', 'zip', 'jpg', 'jpeg', 'png', 'wav', 'mp3', 'mp4', 'avi', '3gp', 'mkv', 'mov', or 'flv'. The file size should not exceed 20 MB.
3. If the answer file size exceeds 20 MB, the student should perform the following procedures:
 - a. Save the answer file in Cloud Storage such as Google Drive, Dropbox, OneDrive, etc.
 - b. Copy the file link and paste it on a blank Microsoft Word document.
 - c. Upload the Microsoft Word document containing the file link through <http://exam.apps.binus.ac.id>.