ANÁLISIS Y DISEÑO DE ALGORITMOS Ing. Román Martínez M. Semestre Agosto-Diciembre 2016

## TAREA #9

Esta tarea tiene por objetivo poner en práctica el uso de HEAPs y de la técnica de Backtracking, preparándote así para el segundo examen de programación del curso.

Para realizar la tarea, atiende las siguientes actividades:

- 1. Escucha la presentación grabada del tema de HEAPs, atendiendo los 7 ejercicios que se indican en la misma. En caso de que el tema no te quede lo suficientemente claro, busca más referencias de estudio en Internet y/o busca al profesor para asesoría. Esta actividad te llevará aproximadamente 3 horas y deberás haberla realizado a más tardar antes de la sesión del martes 8 de noviembre. Se evaluará el entendimiento de los HEAPs a través de un ejercicio en clase que te dará puntos para la calificación de esta tarea.
- 2. Revisa los 4 exámenes de programación #2 de los semestres anteriores que están publicados en el material de apoyo al curso. Léelos con cuidado y pensando en cómo resolverías cada caso si estuvieras en el examen. Podrás identificar que el problema #1 del examen del semestre enero-mayo 2016 ya lo resolviste en la Tarea #8.
- 3. Para que practiques el tema de HEAPs, realiza la implementación del problema #1 del examen del semestre agosto-diciembre 2014.
- 4. Para que practiques el tema de Backtracking, realiza la implementación del problema #1 del examen del semestre agosto-diciembre 2015.

El reporte de esta tarea consiste en entregar una impresión de los códigos de los dos problemas que implementaste. Además deberás grabar un video y <u>subirlo a nuestra página de FB</u> en el que muestres y expliques claramente la ejecución de tus programas respondiendo a las preguntas que están indicadas en cada ejercicio de los problemas del examen. Adicionalmente, en el video menciona cómo fue tu proceso de aprendizaje con esta tarea y qué tan preparado te sientes para enfrentar el examen de programación #2.

Esta tarea deberá entregarse a más tardar el viernes 11 de noviembre 2016.

## ANEXO – Grafos para prueba

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