

## Year 10 IST Assignment Two 2021 – Binary Exploitation and Report (40%)

	Criteria	Mark Range
Password1	<p><b>Submissions at the top of this mark range will:</b></p> <ul style="list-style-type: none"> <li>• have successfully exploited the binary and determined how the password is validated.</li> </ul> <p><b>A write-up at the top of this mark range will include all the following:</b></p> <ul style="list-style-type: none"> <li>• in-depth, step-by-step detail of the successful exploitation, with reference to breakpoints, memory addresses, and other parts of x32dbg if needed and relevant</li> <li>• discussion of the thought process during the exercise, including rationale for certain decisions and things which were tried but didn't work out.</li> <li>• screen shots at various important steps of the exploitation process.</li> </ul>	5 – 0
Password2	<p><b>Submissions at the top of this mark range will:</b></p> <ul style="list-style-type: none"> <li>• have successfully exploited the binary and determined how the password is validated.</li> </ul> <p><b>A write-up at the top of this mark range will include all the following:</b></p> <ul style="list-style-type: none"> <li>• in-depth, step-by-step detail of the successful exploitation, with reference to breakpoints, memory addresses, and other parts of x32dbg if needed and relevant</li> <li>• discussion of the thought process during the exercise, including rationale for certain decisions and things which were tried but didn't work out.</li> <li>• screen shots at various important steps of the exploitation process.</li> </ul>	5 – 0
SerialKey1	<p><b>Submissions at the top of this mark range will:</b></p> <ul style="list-style-type: none"> <li>• have successfully exploited the binary and determined how it validates the serial number.</li> </ul> <p><b>A write-up at the top of this mark range will include all the following:</b></p> <ul style="list-style-type: none"> <li>• in-depth, step-by-step detail of the successful exploitation, with reference to breakpoints, memory addresses, and other parts of x32dbg if needed and relevant</li> <li>• discussion of the thought process during the exercise, including rationale for certain decisions and things which were tried but didn't work out.</li> <li>• screen shots at various important steps of the exploitation process.</li> </ul>	5 – 0
SerialKey3	<p><b>Submissions at the top of this mark range will:</b></p> <ul style="list-style-type: none"> <li>• have successfully exploited the binary and determined how it validates whether the software should be registered.</li> </ul> <p><b>A write-up at the top of this mark range will include all the following:</b></p> <ul style="list-style-type: none"> <li>• in-depth, step-by-step detail of the successful exploitation, with reference to breakpoints, memory addresses, and other parts of x32dbg if needed and relevant</li> <li>• discussion of the thought process during the exercise, including rationale for certain decisions and things which were tried but didn't work out.</li> <li>• screen shots at various important steps of the exploitation process.</li> </ul>	10 – 0
Challenge	<p><b>Submissions at the top of this mark range will:</b></p> <ul style="list-style-type: none"> <li>• have successfully exploited the binary and determined how it determines valid serial numbers.</li> <li>• provide a working keygen to generate valid serial numbers.</li> </ul> <p><b>A write-up at the top of this mark range will include all the following:</b></p> <ul style="list-style-type: none"> <li>• in-depth, step-by-step detail of the successful exploitation, with reference to breakpoints, memory addresses, and other parts of x32dbg if needed and relevant</li> <li>• discussion of the thought process during the exercise, including rationale for certain decisions and things which were tried but didn't work out.</li> <li>• screen shots at various important steps of the exploitation process.</li> <li>• commented code explaining how the keygen works.</li> </ul>	15 – 0
	<p><b>In addition, submissions in the top mark range for all activities will:</b></p> <ul style="list-style-type: none"> <li>• use headings to separate out the report into logical sections.</li> <li>• be aesthetically pleasing, with appropriate use of layout techniques.</li> <li>• be readable and easily understandable.</li> <li>• be free of spelling and grammar errors.</li> </ul>	