**Section: Programming (Advocate: Manish Gadhvi)**

**Provide a definition of what an algorithm is and outline the process in building an application.**

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| <https://github.com/s-j-pearce/Glossary-of-Tech-Terms/blob/master/README.md#algorithm>  <https://github.com/s-j-pearce/HND-VG-PROJECT-1#flow-chart>  <https://github.com/s-j-pearce/HND-VG-PROJECT-2#flow-chart>  <https://github.com/s-j-pearce/HND-VG-PROJECT-3#flow-chart>  <https://github.com/s-j-pearce/Glossary-of-Tech-Terms/blob/master/README.md#programming-stepsbuilding-an-application> |
| The evidence that I have linked is the definition of what an algorithm is.  The second link is to a flow chart from my first project which shows the process of building my application for my trackball game.  The third link is to a flow chart from my second project which shows the process of building my application for my High-Low game.  The fourth link is to a flow chart from my third project which shows the process of building my application for my Anagram Solver game.  The last link will take you to a step by step breakdown of building an application/program |

**Give explanations of what procedural, object orientated and event driven paradigms are; their characteristics and the relationship between them.**

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| <https://github.com/s-j-pearce/Glossary-of-Tech-Terms/blob/master/README.md#procedural>  <https://github.com/s-j-pearce/Glossary-of-Tech-Terms/blob/master/README.md#some-common-paradigms> |
| The two links explain and break down and go into detail about the characteristics and the relationships between procedural, object orientated and event driven paradigms. They take you directly to the sections where I explain each paradigm. |

**Write a program that implements an algorithm using an IDE.**

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| <https://github.com/s-j-pearce/HND-VG-PROJECT-1#flow-chart>  <https://github.com/s-j-pearce/HND-VG-PROJECT-2#flow-chart>  <https://github.com/s-j-pearce/HND-VG-PROJECT-3#flow-chart>  <https://github.com/s-j-pearce/HND-VG-PROJECT-1#ide-used-and-features>  <https://github.com/s-j-pearce/HND-VG-PROJECT-2#ide-used-and-features> |
| The first three links that I have given will take you to the flow charts for my first three projects, the flow chart itself is the algorithm of the development process and the stages that I took to build the application.  The last two links are to show and justify that I have used an IDE in order to build my application. |

**Explain the debugging process and explain the debugging facilities available in the IDE.**

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| <https://github.com/s-j-pearce/HND-VG-PROJECT-1#debugging-process>  <https://github.com/s-j-pearce/Glossary-of-Tech-Terms/blob/master/README.md#debugging> |
| The first link is to a section from my first project where I talked about debugging in the IDE I used whilst building my application. The Second link is my section within my glossary where I go into more detail about debugging as a whole and not just related to the IDE I used. |

**Outline the coding standard you have used in your code.**

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| <https://github.com/s-j-pearce/Glossary-of-Tech-Terms/blob/master/README.md#coding-standards>  <https://github.com/s-j-pearce/HND-VG-PROJECT-1#coding-standards> |
| The two links that are above will take you to sections where I explain how I used coding standards within the development of my applications. |

**Determine the steps taken from writing code to execution.**

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| <https://github.com/s-j-pearce/Glossary-of-Tech-Terms/blob/master/README.md#programming-steps> |
| The link above will take you to a section of my glossary where I talk about the steps to coding a program. |

**Analyse the common features that a developer has access to in an IDE.**

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| <https://github.com/s-j-pearce/HND-VG-PROJECT-1#ide-used-and-features>  <https://github.com/s-j-pearce/HND-VG-PROJECT-2#ide-used-and-features> |
| The Two links above will take you to areas of my documentation where I discuss the IDE used and why. |

**Use the IDE to manage the development process of the program.**

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| <https://github.com/s-j-pearce/HND-VG-ZSL-AMAZING-ANIMAL-RESCUE#iii-scheduleplan>  <https://github.com/s-j-pearce/HND-VG-ZSL-AMAZING-ANIMAL-RESCUE#vi-adapting-to-feedback>  <https://github.com/s-j-pearce/HND-VG-PROJECT-1#ide-used-and-features>  <https://github.com/s-j-pearce/HND-VG-PROJECT-2#ide-used-and-features> |
| The first 2 links will take you to areas of my project where I show and talk bout the development of my application. The last 2 links take you to areas where I talk about the IDE’s I used and why for the projects. |

**Evaluate how the debugging process can be used to help develop more secure, robust applications.**

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| <https://github.com/s-j-pearce/Glossary-of-Tech-Terms/blob/master/README.md#debugging>  <https://github.com/s-j-pearce/HND-VG-PROJECT-1#debugging-process>  <https://github.com/s-j-pearce/HND-VG-PROJECT-2#debugging-process> |
| The first link will take you to my glossary page where I go into further detail about the debugging process. The second two links are where I have implemented the debugging process into those two projects, I specifically looked at how the process was used in the IDE that I used to develop the applications. |

**Examine the implementation of an algorithm in a suitable language. Evaluate the relationship between the written algorithm and the code variant.**

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| <https://github.com/s-j-pearce/Glossary-of-Tech-Terms#algorithm>  <https://github.com/s-j-pearce/Glossary-of-Tech-Terms/blob/master/README.md#implementation-of-an-algorithm>  <https://github.com/s-j-pearce/Glossary-of-Tech-Terms/blob/master/README.md#relationship-between-the-written-algorithm-and-the-code-variant>  <https://github.com/s-j-pearce/HND-VG-PROJECT-1#flow-chart>  <https://github.com/s-j-pearce/HND-VG-PROJECT-2#flow-chart> |
| The first 3 links are to a section in my glossary where I explain what an algorithm is, the implementation of an algorithm also as well as the relationship between the written algorithm and the code variant. The last 2 links are examples of written algorithms. |

**Critically evaluate the source code of an application which implements the programming paradigms, in terms of the code structure and characteristics.**

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| <https://github.com/s-j-pearce/HND-VG-PROJECT-1/blob/master/trace-ball2.0.html>  <https://github.com/s-j-pearce/HND-VG-PROJECT-1#evaluation>  <https://github.com/s-j-pearce/HND-VG-PROJECT-1/blob/master/README.md#ide-used-and-features>  <https://github.com/s-j-pearce/HND-VG-PROJECT-2/blob/master/Game-Final.c>  <https://github.com/s-j-pearce/HND-VG-PROJECT-2#evaluation>  <https://github.com/s-j-pearce/HND-VG-PROJECT-2/blob/master/README.md#ide-used-and-features> |
| The links above will take you to some of my projects where I evaluate my final application. Links 2 and 5 are directly to the evaluation section however the other links are there as evidence towards the evaluation. |

**Evaluate the use of an IDE for development of applications contrasted with not using an IDE.**

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| <https://github.com/s-j-pearce/HND-VG-PROJECT-1#ide-used-and-features>  <https://github.com/s-j-pearce/HND-VG-PROJECT-2#ide-used-and-features>  <https://github.com/s-j-pearce/IDE/blob/master/README.md#diffrence-between-using-an-ide-and-not> |
| The first 2 links will take you to my first 2 projects. The reason for this is because with the first project, we did not use an IDE and for the second project, we used an IDE. The 3rd link will take you to a section on a separate repo where I discuss and evaluate the difference between using and not using an IDE to develop an application. |

**Critically evaluate why a coding standard is necessary in a team as well as for the individual.**

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| <https://github.com/s-j-pearce/HND-VG-PROJECT-1#coding-standards> |
| This link takes you to where I evaluate coding standards used within my project. |