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Introduction



1.1 What is Snake Game?

- ➤ **Snake** is the common name for a video game concept where the player maneuvers a line(snake) which grows in length, with the line itself being a primary obstacle.
- Originated in 1978.
- Has simple controls.

■ 1.2 What's the twist ?

- Snake teleports through purple '?' On taking fruits
- Makes the game more fun and interesting

APPROACH

2.1 How was the idea originated ?

As both of us have an interest in gaming we wanted to implement something different in this, and using the concepts of OOPS such as inheritance, polymorphism and classes we could make our interest into this project. We chose a simple game and added our own idea in it of teleportation so the game is more interesting and original.



SOFTWARE TOOLS USED:

C++

General Purpose programming language

Created by [Bjarne Stroustrup](#)

Extension of [C programming language](#), or "C with [Classes](#)".

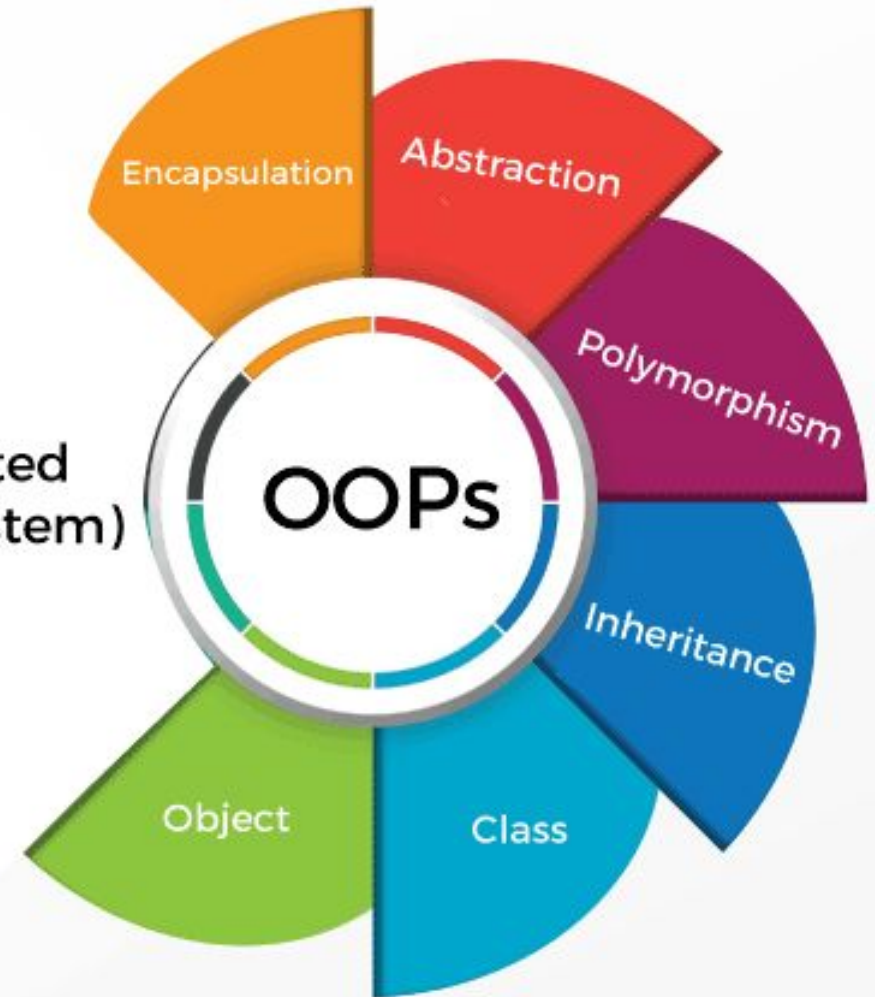
C++ now has [object-oriented](#), [generic](#), and [functional](#) features in addition to facilities for [low-level memory manipulation](#)

Object Oriented Programming: OOP is a programming paradigm built on the concept of objects that contain both data and code to modify the data. Object-oriented programming mimics a lot of the real-world attributes of objects.

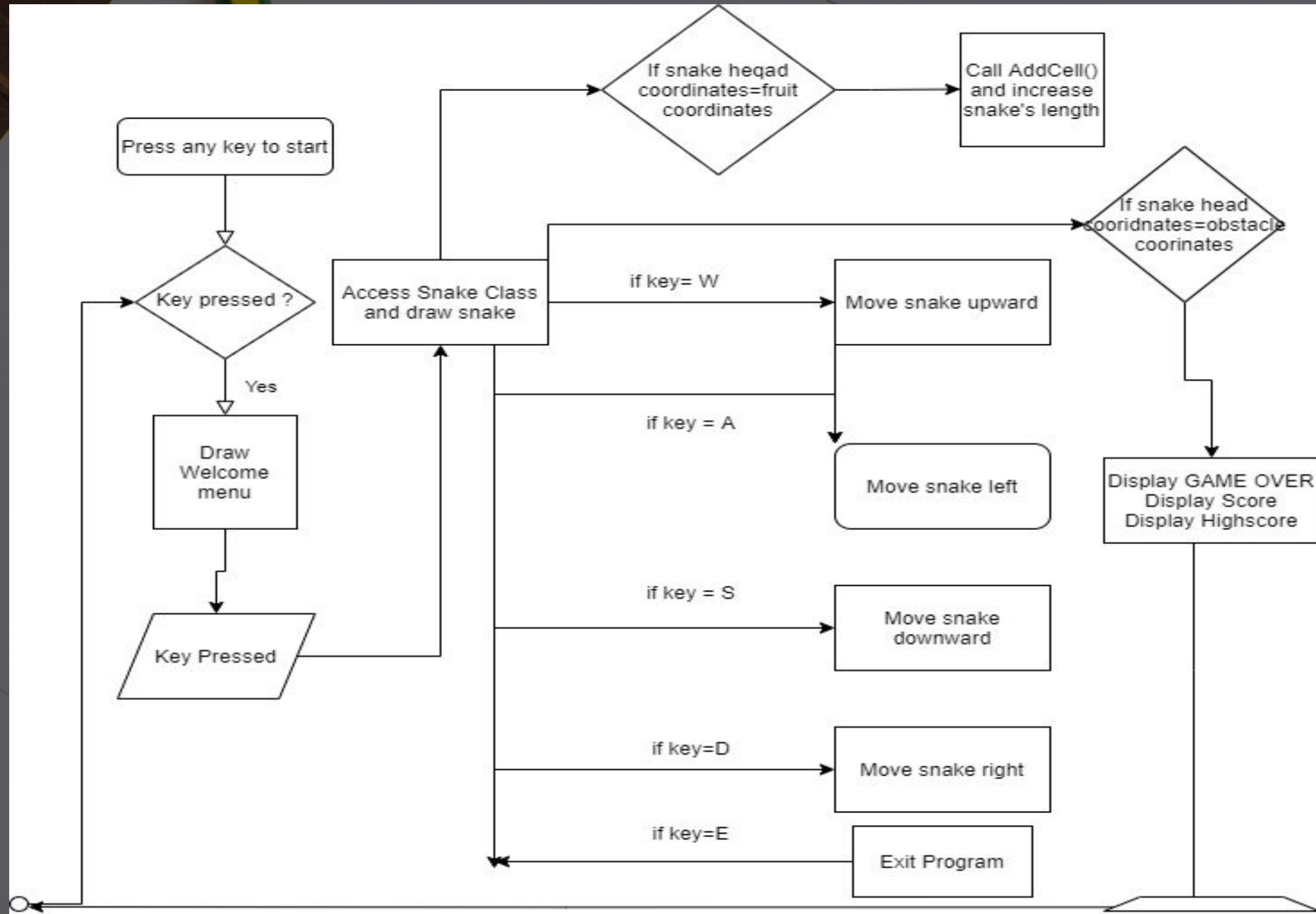
Some of the most widely used object-oriented programming languages are Java, C++, and Ruby. Like Python and JavaScript, many languages that are not strictly object-oriented also provide features like classes and objects inspired by object-oriented programming. [Simula](#) and [Smalltalk](#) are the first languages widely regarded as being object-oriented.

Object Oriented Programmin g

(Object - Oriented
Programming System)



PROTOTYPE FLOWCHART



Libraries, classes and functions used:

Inbuilt header files and functions used:

<code><vector></code>	<code>SetconsoleCursorPoistion()</code>
<code><iostream></code>	<code>Rand()</code>
<code><conio.h></code>	<code>system("cls")</code>
<code><time.h></code>	<code>getch()</code>
<code><dos.h></code>	<code>Sleep()</code>
<code><color.hpp></code>	<code>kbhit()</code>

Classes made:

Snake
Point

■ Functions made

- `gotoxy()`
- `SetPoint()`
- `GetX(),GetY()`
- `MoveUp(),MoveDown(),MoveLeft(),MoveRight()`
- `Draw(),DrawFruit,DrawObstacle`
- `Erase()`
- `CopyPos()`
- `IsEqual()`
- `AddCell()`
- `Move()`
- `SelfCollision()`
- `Collision()`
-



CODE

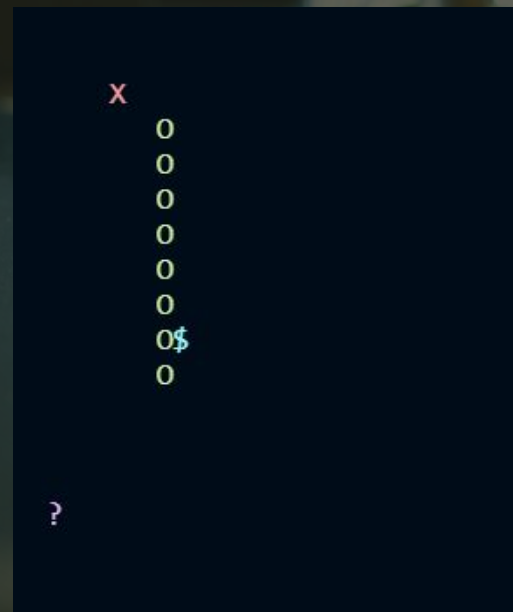

```
PS C:\Users\tusha\Documents\Codes> .\a.exe
WELCOME TO SNAKE GAME made with C++ using concepts of OOPS
MADE BY:Tushar Bhatia (2K20/SE/147) and Vipin Yadav (2K20/SE/158)
```

```
CONTROLS:
W-Move up
S-Move Down
A-Move left
D-Move Right
```

```
RULES: Do not touch the RED obstacle. Do not bite yourself
```

```
OBJECTIVE:Take as many fruit($) as possible.
```

```
Press any key to start
```



OUTPUT

```
Game Over
```

```
SCORE: 110
```

```
congrats you've achieved title of SILVER
```

```
Current HIGHSCORE: 110
```

```
Press any key to start again
```


A top-down view of several wrapped Christmas gifts on a dark wooden surface. The gifts are wrapped in various patterns including red hearts, snowflakes, and geometric designs. Some are tied with red ribbons, while others use twine or checkered ribbons. A pair of hands is visible in the bottom left, adjusting a red ribbon on one of the gifts. The text 'THANK YOU' is centered in white, bold, sans-serif capital letters.

THANK YOU