**iPhone Store**

**by**

**Student Name: Nadia mohamud shormake**

**Id Number: 1804260002**

**Email: 1804260002@students.stamford.edu**

**Student Name: Leroy maswaure**

**Id Number: 1710240005**

**Email: 1710240005@students.stamford.edu**

**Course Instructor: Dr.Surekha Lanka**

**Department: Information Technology**

# October, 2019

**UNDERTAKING**

We declare that the work presented in this project titled “*iPhone Store*”, submitted to Information Technology Department, Faculty of Business & Technology, Stamford International University, This our original work. We have not plagiarized .

October, 2019

Stamford International University

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(Nadia Mohamud 1804260002 )

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(Leroy Maswaure 1710240005 )

****

**CERTIFICATE**

Certified that the work contained in the project titled “*Library Management for IT Department in Stamford University*”, by Nadia Mohamud Shormake and Leroy Maswaure, has been carried out under our supervision and that this work has not been submitted elsewhere for a degree.

Dr.Surekha Lanka

Information Technology Department,

Stamford International University

Bangkok.

**INDEX**

Cover page 1

Undertaking 2

Certificate 3

Index 4

Abstract 5

Introduction. 5

Algorithm. 6

Flowchart 7

Framework 8

Methodology 8

Code 9

Results 25

Conclusion 30

**Abstract**

Mobile phones have been playing a major role in today’s society, they have become a tool that has been a necessity in people’s daily lives in terms of communication, and technology. Mobile phones come in many statures varying in size, battery life, the quality of the camera and whether it is a luxury phone or not. This project aims to analyze the apple phones, and their characteristics such as the model, storage size, colour, capacity, battery life, and price. As well as observing how they have been advancing throughout the years looking at a particular trend. According to the information available, rules will be made with the use of Visual Prolog, which will assist us in achieving our goal.

**Introduction**

Apple CEO Steve Jobs previewed the first generation iPhone on the 9th of January 2007. The phone started at a price of $499 for 4GB model, $599 for the 8GB version. Mobile phone enthusiasts claimed the phone was too expensive to do well in the market. The 2nd generation iPhone included 3G connectivity and supported the newly launched App Store. The app store idea worked so well that it replicated everything from your smart TV to your Windows laptop and mac computer and even music player, and the change helped the iPhone to gain traction. Being the first touchscreen mobile phone of its generation in 2007 and the first mobile phone with an operating system exclusive to the Apple brand, the iPhone has been a machine that has become an important device for portable information access on the go. Over a decade since the release of the first iPhone Apple has been dominating the smartphone market with over 50% in world market share and with releases of new smartphones every year the market share increases. Apple has released new devices such as the iPhone 3, 4, 5, 5s, 5c, 6, 6s and the creation and introduction of bigger and better and thinnest seamless design premium smartphones in 2014 called the plus versions(6s plus, 7 plus, 8 plus and Xs Max, 11 pro) because now it is an era of the big smartphones with incredibly huge storage and a ram for smartphones. These plus versions are packed with innovative new technologies and second-generation 64-bit desktop-class architecture with the creation of chipsets that offer fast performance and include a payment system called Apple pay which is a direct competitor to tech giants such as PayPal. Over the years the apple has been involved in a number of controversies with the main one being the increment of prices of their phones to unbelievable and unaffordable prices with them arguing that their phones are “premium”. Also, the conspiracy that apple slows down their phone’s in order for consumers to buy the new software unlike their android competitors which allow users to use any software they please. With this controversy the latest release of the iPhone 11 apple has slightly reduced prices of their smartphones and still argue that they are maintaining their innovation. In this project will assess the price ranges from the first iPhone to the recent one and further in the report give reasons to why prices increase or decrease.

**Algorithm**

1. Enter website

2. Search model/colour/storage

3. If no iPhone model/colour/storage go to step 2

4.If available place order

5. Check if trade in is allowed

6. If no trade in go step 8

7. if yes, trade in trade in old phone

8. make payment

**Flowchart**

A close up of a logo

Description automatically generated

**Framework**

A picture containing screenshot

Description automatically generated

**Methodology**

In this project, we use compound elements for the iPhone information, customer name and buy dates which will be necessary in order to know when an iPhone was bought for trade-ins. The methods used in this project are the recursion function and backtracking.

Recursion is when predicates hold goals that refer to themselves. Recursion is a function that continuously calls itself until a certain goal is achieved. Using visual prolog, the recursion will happen when the predicates have a goal that refers to itself. An example of this is when a predicate such as buys(customer, iPhone) can also be a goal.

Another method used is the backtracking algorithm. Backtracking is an algorithm used to solve problems one problem at a time, by eliminating each means of solving a problem that does not satisfy the condition of the problem. Backtracking can be used for searching an available iPhone model, colour and storage, if not available the program goes back to another predicate or clause or search for another option or goal. Examples of clauses in the project are a customer buys iPhone searching for a specific model, colour and storage. which is shown in the visual prolog with the code below.

iphone("1"):-

write(" choose colour according to number :"),nl,

write("1- Black"),nl,

write("2- Silver"),nl,

write("3- Red"),nl,

write("4- Gold "),nl,

write("5- Rose gold"),nl,

With the clauses above it is possible for the backtracking algorithm to search for satisfactory conditions to solve the problem.

**Code**

PREDICATES

nondeterm start%state program

nondeterm iphone(symbol)% iphones models

nondeterm tradein(symbol)%trade in old iphone

nondeterm price1(symbol)% price or iphone 1

nondeterm price3(symbol)%price or iphone 3

nondeterm price4(symbol)%price or iphone 4

nondeterm price5(symbol)%price or iphone 5

nondeterm price6(symbol)%price or iphone 6

nondeterm price7(symbol)%price or iphone 7

nondeterm price8(symbol)%price or iphone 8

nondeterm price10(symbol)%price or iphone 10

nondeterm price11(symbol)%price or iphone 11

nondeterm choice(symbol)

/\*readln to read string input from user

readint to read integer from user

! to end role\*/

Clauses

%----------------------------Start program -------------------

%Entry sentence

start:-

write("iphone store center "),nl,

write( "Choose iphone :- "),nl,

write( " 1- iphone 1" ),nl,

write( " 3- iphone 3" ),nl,

write( " 4- iphone 4" ),nl,

write( " 5- iphone 5" ),nl,

write( " 5s- iphone 5s" ),nl,

write( " 5c- iphone 5c" ),nl,

write( " 6- iphone 6" ),nl,

write( " 6plus- iphone 6plus" ),nl,

write( " 6s- iphone 6s" ),nl,

write( " 6splus- iphone 6splus " ),nl,

write( " 7- iphone 7 " ),nl,

write( " 7plus- iphone 7plus " ),nl,

write( " 8- iphone 8 " ),nl,

write( " 8plus- iphone 8plus " ),nl,

write( " x- iphone x" ),nl,

write( " xs- iphone xs " ),nl,

write( " xsmax- iphone xsmax " ),nl,

write( " xr- iphone xr " ),nl,

write( " 11- iphone 11 " ),nl,

write( " 11- iphone 11pro " ),nl,

write( " ^\_^ Select any iphone model by entering model name ^\_^"),nl,

readln(Answer),

iphone(Answer),

nl, fail.

%to end

start:-!.

%-------------------Characteristics ------------------------------------

iphone("1"):-

write(" choose colour according to number :"),nl,

write("1- Black"),nl,

write("2- Silver"),nl,

write("3- Red"),nl,

write("4- Gold "),nl,

write("5- Rose gold"),nl,

write(" Engraving on your iphone 1 :by request "),nl,

write("call : 0510772314"),nl,

write(" Enter available colour according to number "),nl,

readln(Answer),nl,

price1(Answer),nl,

write(" press 'y' to trade in old device 'n' If you want to make order "),nl,

readln(A),

tradein(A),!.

%------------------------

iphone("3"):-

write(" choose colour according to number :"),nl,

write("1- Black"),nl,

write("2- Silver"),nl,

write("3- Red"),nl,

write("4- Gold "),nl,

write("5- Rose gold"),nl,

write(" Engraving on your iphone 3 :by request "),nl,

write("call : 0510772314"),nl,

write(" Enter available colour according to number "),nl,

readln(Answer),nl,

price3(Answer),nl,

write(" press 'y' to trade in old device 'n' If you want to make order "),nl,

readln(A),

tradein(A),!.

%------------------------

iphone("4"):-

write(" choose colour according to number :"),nl,

write("1- Black"),nl,

write("2- Silver"),nl,

write("3- Red"),nl,

write("4- Gold "),nl,

write("5- Rose gold"),nl,

write(" Engraving on your iphone 4 :by request "),nl,

write("call : 0510772314"),nl,

write(" Enter available colour according to number "),nl,

readln(Answer),nl,

price4(Answer),nl,

write(" press 'y' to trade in old device 'n' If you want to make order "),nl,

readln(A),

tradein(A),!.

%------------------------

iphone("5"):-

write(" choose colour according to number :"),nl,

write("1- Black"),nl,

write("2- Silver"),nl,

write("3- Red"),nl,

write("4- Gold "),nl,

write("5- Rose gold"),nl,

write(" Engraving on your iphone 5 :by request "),nl,

write("call : 0510772314"),nl,

write(" Enter available colour according to number "),nl,

readln(Answer),nl,

price5(Answer),nl,

write(" press 'y' to trade in old device 'n' If you want to make order "),nl,

readln(A),

tradein(A),!.

%------------------------

iphone("5s"):-

write(" choose colour according to number :"),nl,

write("1- Black"),nl,

write("2- Silver"),nl,

write("3- Red"),nl,

write("4- Gold "),nl,

write("5- Rose gold"),nl,

write(" Engraving on your iphone 5s :by request "),nl,

write("call : 0510772314"),nl,

write(" Enter available colour according to number "),nl,

readln(Answer),nl,

price5(Answer),nl,

write(" press 'y' to trade in old device 'n' If you want to make order "),nl,

readln(A),

tradein(A),!.

%------------------------

iphone("5c"):-

write(" choose colour according to number :"),nl,

write("1- Black"),nl,

write("2- Silver"),nl,

write("3- Red"),nl,

write("4- Gold "),nl,

write("5- Rose gold"),nl,

write(" Engraving on your iphone 5c :by request "),nl,

write("call : 0510772314"),nl,

write(" Enter available colour according to number "),nl,

readln(Answer),nl,

write(" choose capacity according to number"),nl,

write("1- 32GB"),nl,

write("2- 64GB"),nl,

write("3- 128GB"),nl,nl,

write(" Enter available capacity according to number "),nl,

price5(Answer),nl,

write(" press 'y' to trade in old device 'n' If you want to make order "),nl,

readln(A),

tradein(A),!.

%------------------------

iphone("6"):-

write(" choose colour according to number :"),nl,

write("1- Black"),nl,

write("2- Silver"),nl,

write("3- Red"),nl,

write("4- Gold "),nl,

write("5- Rose gold"),nl,

write(" Engraving on your iphone 6 :by request "),nl,

write("call : 0510772314"),nl,

write(" Enter available colour according to number "),nl,

readln(Answer),nl,

price6(Answer),nl,

write(" press 'y' to trade in old device 'n' If you want to make order "),nl,

readln(A),

tradein(A),!.

%------------------------

iphone("6plus"):-

write(" choose colour according to number :"),nl,

write("1- Black"),nl,

write("2- Silver"),nl,

write("3- Red"),nl,

write("4- Gold "),nl,

write("5- Rose gold"),nl,

write(" Engraving on your iphone 6plus :by request "),nl,

write("call : 0510772314"),nl,

write(" Enter available colour according to number "),nl,

readln(Answer),nl,

price6(Answer),nl,

write(" press 'y' to trade in old device 'n' If you want to make order "),nl,

readln(A),

tradein(A),!.

%------------------------

iphone("6s"):-

write(" choose colour according to number :"),nl,

write("1- Black"),nl,

write("2- Silver"),nl,

write("3- Red"),nl,

write("4- Gold "),nl,

write("5- Rose gold"),nl,

write(" Engraving on your iphone 6s :by request "),nl,

write("call : 0510772314"),nl,

write(" Enter available colour according to number "),nl,

readln(Answer),nl,

price6(Answer),nl,

write(" press 'y' to trade in old device 'n' If you want to make order "),nl,

readln(A),

tradein(A),!.

%------------------------

iphone("6splus"):-

write(" choose colour according to number :"),nl,

write("1- Black"),nl,

write("2- Silver"),nl,

write("3- Red"),nl,

write("4- Gold "),nl,

write("5- Rose gold"),nl,

write(" Engraving on your iphone 6splus :by request "),nl,

write("call : 0510772314"),nl,

write(" Enter available colour according to number "),nl,

readln(Answer),nl,

price6(Answer),nl,

write(" press 'y' to trade in old device 'n' If you want to make order "),nl,

readln(A),

tradein(A),!.

%------------------------

iphone("7"):-

write(" choose colour according to number :"),nl,

write("1- Black"),nl,

write("2- Silver"),nl,

write("3- Red"),nl,

write("4- Gold "),nl,

write("5- Rose gold"),nl,

write(" Engraving on your iphone 7 :by request "),nl,

write("call : 0510772314"),nl,

write(" Enter available colour according to number "),nl,

readln(Answer),nl,

price7(Answer),nl,

write(" press 'y' to trade in old device 'n' If you want to make order "),nl,

readln(A),

tradein(A),!.

%------------------------

iphone("7plus"):-

write(" choose colour according to number :"),nl,

write("1- Black"),nl,

write("2- Silver"),nl,

write("3- Red"),nl,

write("4- Gold "),nl,

write("5- Rose gold"),nl,

write(" Engraving on your iphone 7plus :by request "),nl,

write("call : 0510772314"),nl,

write(" Enter available colour according to number "),nl,

readln(Answer),nl,

price7(Answer),nl,

write(" press 'y' to trade in old device 'n' If you want to make order "),nl,

readln(A),

tradein(A),!.

%------------------------

iphone("8"):-

write(" choose colour according to number :"),nl,

write("1- Black"),nl,

write("2- Silver"),nl,

write("3- Red"),nl,

write("4- Gold "),nl,

write("5- Rose gold"),nl,

write(" Engraving on your iphone 8 :by request "),nl,

write("call : 0510772314"),nl,

write(" Enter available colour according to number "),nl,

readln(Answer),nl,

price8(Answer),nl,

write(" press 'y' to trade in old device 'n' If you want to make order "),nl,

readln(A),

tradein(A),!.

%------------------------

iphone("8plus"):-

write(" choose colour according to number :"),nl,

write("1- Black"),nl,

write("2- Silver"),nl,

write("3- Red"),nl,

write("4- Gold "),nl,

write("5- Rose gold"),nl,

write(" Engraving on your iphone 8plus :by request "),nl,

write("call : 0510772314"),nl,

write(" Enter available colour according to number "),nl,

readln(Answer),nl,

price8(Answer),nl,

write(" press 'y' to trade in old device 'n' If you want to make order "),nl,

readln(A),

tradein(A),!.

%------------------------

iphone("x"):-

write(" choose colour according to number :"),nl,

write("1- Black"),nl,

write("2- Silver"),nl,

write("3- Red"),nl,

write("4- Gold "),nl,

write("5- Rose gold"),nl,

write(" Engraving on your iphone x :by request "),nl,

write("call : 0510772314"),nl,

write(" Enter available colour according to number "),nl,

readln(Answer),nl,

price10(Answer),nl,

write(" press 'y' to trade in old device 'n' If you want to make order "),nl,

readln(A),

tradein(A),!.

%------------------------

iphone("xs"):-

write(" choose colour according to number :"),nl,

write("1- Black"),nl,

write("2- Silver"),nl,

write("3- Red"),nl,

write("4- Gold "),nl,

write("5- Rose gold"),nl,

write(" Engraving on your iphone xs :by request "),nl,

write("call : 0510772314"),nl,

write(" Enter available colour according to number "),nl,

readln(Answer),nl,

price10(Answer),nl,

write(" press 'y' to trade in old device 'n' If you want to make order "),nl,

readln(A),

tradein(A),!.

%------------------------

iphone("xsmax"):-

write(" choose colour according to number :"),nl,

write("1- Black"),nl,

write("2- Silver"),nl,

write("3- Red"),nl,

write("4- Gold "),nl,

write("5- Rose gold"),nl,

write(" Engraving on your iphone xsmax :by request "),nl,

write("call : 0510772314"),nl,

write(" Enter available colour according to number "),nl,

readln(Answer),nl,

price10(Answer),nl,

write(" press 'y' to trade in old device 'n' If you want to make order "),nl,

readln(A),

tradein(A),!.

%------------------------

iphone("11"):-

write(" choose colour according to number :"),nl,

write("1- Black"),nl,

write("2- Silver"),nl,

write("3- Red"),nl,

write("4- Gold "),nl,

write("5- Rose gold"),nl,

write(" Engraving on your iphone 11 :by request "),nl,

write("call : 0510772314"),nl,

write(" Enter available colour according to number "),nl,

readln(Answer),nl,

price11(Answer),nl,

write(" press 'y' to trade in old device 'n' If you want to make order "),nl,

readln(A),

tradein(A),!.

%------------------------

iphone("11pro"):-

write(" choose colour according to number :"),nl,

write("1- Black"),nl,

write("2- Silver"),nl,

write("3- Red"),nl,

write("4- Gold "),nl,

write("5- Rose gold"),nl,

write(" Engraving on your iphone 11pro :by request "),nl,

write("call : 0510772314"),nl,

write(" Enter available colour according to number "),nl,

readln(Answer),nl,

price11(Answer),nl,

write(" press 'y' to trade in old device 'n' If you want to make order "),nl,

readln(A),

tradein(A),!.

%---- not found---------------

iphone(Answer):-

write("This ' " , Answer ," ' sums to not found"),nl,

write("Enter your Choice "),nl,

readln(X),iphone(X),!.

%----------------------------------------end iphones models-----------------------------

%-----------------------------------------tradein

tradein("y"):-

write(" Trade in old iphone "),nl,nl,

write("Do you want to select another iphone ? press 'y' to Yes or 'n' to No . "),nl,

readln(X),

choice(X),!.

%-----------

tradein("Y"):-

write(" Trade in old iphone "),nl,nl,

write("Do you want to select another iphone ? press 'y' to Yes or 'n' to No . "),nl,

readln(X),

choice(X),!.

%-----------

tradein("N"):-write("Do you want to select another iphone ? press 'y' to Yes or 'n' to No . "),nl,

readln(X),

choice(X),!.

%---------

tradein("n"):-write("Do you want to select another iphone ? press 'y' to Yes or 'n' to No . "),nl,

readln(X),

choice(X),!.

%--------------------------------

%----------------------------------------end tradein---------------------------------

%------------------------to select another iphones models-------------------

choice("y"):- start,!.

choice("Y"):- start,!.

choice("n"):- write ("thank you for shopping"), nl,!.

choice("N"):-write ("thank you for shopping"), nl, !.

%---------------------------------price1-------------------------------

price1("1"):-

write("The price of the iphone sums to $200"),nl, write(" Enter price of iphone: "),nl,

readint(Ans),

X=Ans\*1,

write("the price sums to",X," "),!.

%-----------------------

price1("2"):-

write("The price sums to $300"),nl, write(" Enter price of iphone: "),nl,

readint(Ans),

X=Ans\*1,

write("the price sums to",X," "),!.

%-----------------------

price1("4"):-

write("The price of the iphone sums to $350"),nl, write(" Enter price of iphone: "),nl,

readint(Ans),

X=Ans\*1,

write("the price sums to",X," "),!.

%-----------------------

%--------price not found---------------

price1(Z):-

write("This ' " , Z ," ' sums to not found"),nl,

write("Enter your Choice "),nl,

readln(Zn),

price1(Zn),!.

%---------------------------end price1 ----------------------------------

%---------------------------------price3-------------------------------

price3("1"):-

write("The price of the iphone sums to $399"),nl, write(" Enter price of iphone: "),nl,

readint(Ans),

X=Ans\*1,

write("the price sums to",X," "),!.

%-----------------------

price3("2"):-

write("The price of the iphone sums to $449 "),nl, write(" Enter price of iphone: "),nl,

readint(Ans),

X=Ans\*1,

write("the price sums to",X," "),!.

%-----------------------

price3("3"):-

write("The price of the iphone sums to $540 "),nl, write(" Enter price of iphone: "),nl,

readint(Ans),

X=Ans\*1,

write("the price sums to",X," "),!.

%-----------------------

%--------price not found---------------

price3(Z):-

write("This ' " , Z ," ' sums to not found"),nl,

write("Enter your Choice "),nl,

readln(Zn),

price3(Zn),!.

%---------------------------end price 2----------------------------------

%---------------------------------price4-------------------------------

%-----------------------

price4("1"):-

write("The price of the iphone sums to $400"),nl, write(" Enter price of iphone: "),nl,

readint(Ans),

X=Ans\*1,

write("the price sums to",X," "),!.

%-----------------------

price4("2"):-

write("The price of the iphone sums to $500"),nl, write(" Enter price of iphone: "),nl,

readint(Ans),

X=Ans\*1,

write("the price sums to",X," "),!.

%-----------------------

price4("3"):-

write("The price of the iphone sums to $599"),nl, write(" Enter price of iphone: "),nl,

readint(Ans),

X=Ans\*1,

write("the price sums to",X," "),!.

%--------price not found---------------

price4(Z):-

write("This ' " , Z ," ' sums to not found"),nl,

write("Enter your Choice "),nl,

readln(Zn),

price4(Zn),!.

%---------------------------end price4 ----------------------------------

%---------------------------------price5-------------------------------

price5("1"):-

write("The price of the iphone sums to $500"),nl, write(" Enter price of iphone: "),nl,

readint(Ans),

X=Ans\*1,

write("the price sums to",X," "),!.

%-----------------------

price5("2"):-

write("The price of the iphone sums to $549"),nl, write(" Enter price of iphone: "),nl,

readint(Ans),

X=Ans\*1,

write("the price sums to",X," "),!.

%-----------------------

price5("3"):-

write("The price of the iphone sums to $600"),nl, write(" Enter price of iphone: "),nl,

readint(Ans),

X=Ans\*1,

write("the price sums to",X," "),!.

%-----------------------

%--------price not found---------------

price5(Z):-

write("This ' " , Z ," ' sums to not found"),nl,

write("Enter your Choice "),nl,

readln(Zn),

price4(Zn),!.

%---------------------------end price5 ----------------------------------

%---------------------------------price6-------------------------------

price6("1"):-

write("The price of the iphone sums to $500"),nl, write(" Enter price of iphone: "),nl,

readint(Ans),

X=Ans\*1,

write("the price sums to",X," "),!.

%-----------------------

price6("2"):-

write("The price of the iphone sums to $550"),nl, write(" Enter price of iphone: "),nl,

readint(Ans),

X=Ans\*1,

write("the price sums to",X," "),!.

%-----------------------

price6("3"):-

write("The price of the iphone sums to $599"),nl, write(" Enter price of iphone: "),nl,

readint(Ans),

X=Ans\*1,

write("the price sums to",X," "),!.

%-----------------------

%--------price not found---------------

price6(Z):-

write("This ' " , Z ," ' sums to not found"),nl,

write("Enter your Choice "),nl,

readln(Zn),

price6(Zn),!.

%---------------------------end price6 ----------------------------------

%---------------------------------price7-------------------------------

price7("1"):-

write("The price of the iphone sums to $600"),nl, write(" Enter price of iphone: "),nl,

readint(Ans),

X=Ans\*1,

write("the price sums to",X," "),!.

%-----------------------

price7("2"):-

write("The price of the iphone sums to $649"),nl, write(" Enter price of iphone: "),nl,

readint(Ans),

X=Ans\*1,

write("the price sums to",X," "),!.

%-----------------------

price7("3"):-

write("The price of the iphone sums to $699"),nl, write(" Enter price of iphone: "),nl,

readint(Ans),

X=Ans\*1,

write("the price sums to",X," "),!.

%-----------------------

%--------price not found---------------

price7(Z):-

write("This ' " , Z ," ' sums to not found"),nl,

write("Enter your Choice "),nl,

readln(Zn),

price7(Zn),!.

%---------------------------end price7 ----------------------------------

%---------------------------------price8-------------------------------

price8("1"):-

write("The price of the iphone sums to $649"),nl, write(" Enter price of iphone: "),nl,

readint(Ans),

X=Ans\*1,

write("the price sums to",X," "),!.

%-----------------------

price8("2"):-

write("The price of the iphone sums to $699"),nl, write(" Enter price of iphone: "),nl,

readint(Ans),

X=Ans\*1,

write("the price sums to",X," "),!.

%-----------------------

price8("3"):-

write("The price of the iphone sums to $749"),nl, write(" Enter price of iphone: "),nl,

readint(Ans),

X=Ans\*1,

write("the price sums to",X," "),!.

%-----------------------

%--------price not found---------------

price8(Z):-

write("This ' " , Z ," ' sums to not found"),nl,

write("Enter your Choice "),nl,

readln(Zn),

price8(Zn),!.

%---------------------------end price8 ----------------------------------

%---------------------------------price10-------------------------------

price10("1"):-

write("The price of the iphone sums to $699"),nl, write(" Enter price of iphone: "),nl,

readint(Ans),

X=Ans\*1,

write("the price sums to",X," "),!.

%-----------------------

price10("2"):-

write("The price of the iphone sums to $749"),nl, write(" Enter price of iphone: "),nl,

readint(Ans),

X=Ans\*1,

write("the price sums to",X," "),!.

%-----------------------

price10("3"):-

write("The price of the iphone sums to $799"),nl, write(" Enter price of iphone: "),nl,

readint(Ans),

X=Ans\*1,

write("the price sums to",X," "),!.

%-----------------------

%--------price not found---------------

price10(Z):-

write("This ' " , Z ," ' sums to not found"),nl,

write("Enter your Choice "),nl,

readln(Zn),

price10(Zn),!.

%---------------------------end price10 ----------------------------------

%---------------------------------price11-------------------------------

price11("1"):-

write("The price of the iphone sums to $699"),nl, write(" Enter price of iphone: "),nl,

readint(Ans),

X=Ans\*1,

write("the price sums to",X," "),!.

%-----------------------

price11("2"):-

write("The price of the iphone sums to $799"),nl, write(" Enter price of iphone: "),nl,

readint(Ans),

X=Ans\*1,

write("the price sums to",X," "),!.

%-----------------------

price11("3"):-

write("The price of the iphone sums to $1000"),nl, write(" Enter price of iphone: "),nl,

readint(Ans),

X=Ans\*1,

write("the price sums to",X," "),!.

%-----------------------

%--------price not found---------------

price11(Z):-

write("This ' " , Z ," ' sums to not found"),nl,

write("Enter your Choice "),nl,

readln(Zn),

price11(Zn),!.

%---------------------------end price11 ----------------------------------

%------------------------------------------------------------------------------------------------end program------------------------------------

Goal

start.

**Results**

A screenshot of a cell phone

Description automatically generated

A screenshot of a cell phone

Description automatically generated

A screenshot of a cell phone

Description automatically generated

A screenshot of a social media post

Description automatically generated

A screenshot of a cell phone

Description automatically generatedA screenshot of text

Description automatically generatedA screenshot of a cell phone

Description automatically generated

A screenshot of a social media post

Description automatically generated

**Conclusion**

This project was focusing on an online iPhone store where customers can buy their iPhone devices and have the ability to trade in their old devices in order to get a discount to purchase the new one. The predicted outcomes were to find which customer buys what type of model, colour and storage of the iPhone and which customers do not buy any devices. There were scenarios where a customer could have purchased a phone way back and purchased another one recently that would play as a trade-in. With backtracking and the help of our algorithm, it was capable to let customers search for the device and its characteristics if they were available till the end goal is achieved, which was either buying a device or not. However, we still face challenges implementing certain rules in order to achieve our goal and implementation of new rules, clauses and new compound elements will be considered.