

1. Which function is responsible for getting the name from the user?
GetPlayerName()
2. How will you ensure that the user is asked for the name repeatedly? **You would use a while loop that goes:** While PlayerName = "": PlayerName = input('Please enter your name: ')
3. What additional variable will you need and what will its datatype be?
Whether they want to add their score or not, this will be a string datatype as it will either be Yes or No.

```
OUTPUT 'Please enter your name: '
PlayerName ← INPUT
WHILE PlayerName = "" THEN
OUTPUT 'You must enter something for your name!'
OUTPUT 'Please enter your name: '
PlayerName ← INPUT
```

1. Which function is responsible for adding scores to the table?
UpdateRecentScores(RecentScores, Score)
2. What additional module will you need to import into the program?
datetime module
3. Identify the four functions that will require changes:
**UpdateRecentScores(RecentScores, Score),
DisplayRecentScores(RecentScores), GetPlayerName(),
PlayGame(Choice, Deck, RecentScores)**
4. How do you convert a string in the format DD/MM/YY (e.g. 14/08/93) to a date type in Python?

```
dob = "04/01/1998"
actual_date = datetime.strptime(dob, "%d/%m/%Y")
```

1. Describe each variable role in your own words.
 - Fixed Value **A variable that holds a value that is either hardcoded or inputed by the user but with no calculations or changes**
 - Stepper **A variable that acts as a counter when iterating through a loop giving a systematic value each loop**
 - Most recent holder **A variable that stores the most recent value at any point when processing multiple values to assign to a variable**
 - Most wanted holder **A variable that holds the correct value(s) from a list of variables when we given a condition. E.g smallest number**
 - Gather **A variable that holds a value which is accumulated after effects of other values**
 - Transformation **A variable that changes after a stated calculation with other variable**
 - Follower **A variable that is updated with the leftover value of another data item**
 - Temporary **A variable that hold a value for a limited time**
1. Give an example of variable from the program code for each variable role:
 - Fixed Value: NoOfSwaps = 1000

- Stepper:

```
for Count in range(1, 52 - NoOfCardsTurnedOver):
    Deck[Count].Rank = Deck[Count + 1].Rank
```

- Most recent holder: NoOfCardsTurnedOver = 1
- Most wanted holder:

```
Higher = False
if NextCard.Rank > LastCard.Rank:
    Higher = True
```

- Gather: self.Score = 0
- Transformation: NextCard = TCard()
- Follower: LastCard = TCard()
- Temporary: RecentScores[Count].Name = PlayerName

1. Describe the difference between passing by value and passing by reference in your own words.

Passing by reference means passing in a variable name that is assigned to a value to use. We can then return this same variable and the changes made to it will be updated. Passing by value is passing in an argument to a function which creates a copy for the function to process. We can return the outcome of the function but the original argument will stay the same.

1. For each function in the program identify the mechanism using to pass each parameter. Note: this task will take a while but it will improve your understanding of the program and be useful for the exam.

def GetRank(RankNo): by value

def GetSuit(SuitNo): by value

def DisplayMenu(): None

def GetMenuChoice(): None

def LoadDeck(Deck): by reference

def ShuffleDeck(Deck): by reference

def DisplayCard(ThisCard): by reference

def GetCard(ThisCard, Deck, NoOfCardsTurnedOver): by reference and value

def IsNextCardHigher(LastCard, NextCard): by reference

def GetPlayerName(): None

def GetChoiceFromUser(): None

def DisplayEndOfGameMessage(Score): by reference

def DisplayCorrectGuessMessage(Score): by reference

def ResetRecentScores(RecentScores): by reference

def DisplayRecentScores(RecentScores): by reference

def UpdateRecentScores(RecentScores, Score): by reference

def PlayGame(Choice, Deck, RecentScores): by reference