## **SOURCE CODE**

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The following program is user-friendly, menu-driven program in which the user gets to choose a game he/she wishes to play #defining random number guessing game function def ran no(): print("You have chosen to play the RANDOM NUMBER GUESSING GAME!\nIn this game, the computer will generate a random number between 1 and 20 and you have to guess the number, based on the hints given. You will be given a maximum of 5 chances. Are you ready?") input("Press enter to begin") print() import random realnum=random.randrange(1,21) while True: for i in range (5): num=int(input("Enter your guess: if num>20 or num<1: print("Wrong input! Enter a number between 1 and 20.") elif num<realnum: print("The number is between",num,"and 20.") elif num>realnum: print("The number is between 1 and ",num,".",sep="") else: print("Congratulations! You won!")

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break
        if i==4:
           print("Sorry, you lost!")
     inp=input("\n\nDo you want to play again? (Y/N): ").upper()
     if inp!="Y":
        break
#defining pi value game function
def pi_value():
  print("You have chosen to play the PI GAME!\nHere you can input a
number and the value of PI will be displayed based on your input.")
  input("Press enter to begin")
  print()
  pi_nos=['1','4','1','5','9','2','6','5','3','5','8','9','7','9','3']
  while True:
     n=int(input("Enter the number of decimal places: "))
     if n>0 and n<16:
        print('3 .',end=' ')
        for i in range (0,n):
           print(pi_nos[i],end=" ")
     else:
        print("Please enter a valid number (between 1 and 15)")
     inp=input("\n\nDo you want to play again? (Y/N): ").upper()
     if inp!="Y":
        break
#defining quiz function
def quiz():
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list_ans=["A","B","C","B","B","A","C","A","C","B"]
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print("You have chosen to play the QUIZ!\nIn this game, you will have 10 questions. You can enter the option (A or B or C) and for each correct answer you get 10 points. For each wrong answer, you lose 5 points. So lets qo!")

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input("Press enter to begin")
print()
while True:
   pts=0
  print("1.How many nations border India?")
  print("A.7\tB.10\tC.8")
  ans=input("Enter the option:
                                ").upper()
  if ans==list_ans[0]:
     pts+=10
  else:
     pts=5
  print("2.Which sea creature has 3 hearts?")
  print("A.Starfish\tB.Octopus\tC.Shark")
  ans=input("Enter the option: ").upper()
  if ans==list ans[1]:
     pts+=10
  else:
     pts=5
  print("3.What is the Italian word for Pie?")
  print("A.Risotto\tB.Lasagna\tC.Pizza")
  ans=input("Enter the option:
                                  ").upper()
  if ans==list_ans[2]:
     pts+=10
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else:
  pts-=5
print("4.Equinophobia is the fear of-")
print("A.Insects\tB.Horses\tC.Cats")
ans=input("Enter the option:
                              ").upper()
if ans==list ans[3]:
  pts+=10
else:
  pts=5
print("5.What is the diameter of the Earth (in km)?")
print("A.13120 B.12740 C.12450")
ans=input("Enter the option: ").upper()
if ans==list_ans[4]:
  pts+=10
else:
  pts-=5
print("6.Who discovered the cell?")
print("A.Robert Hooke B.Charles Darwin C.Gregor Mendel")
ans=input("Enter the option:
                              ").upper()
if ans==list_ans[5]:
  pts+=10
else:
  pts=5
print("7.Which city is called the City of Love?")
print("A.New York B.Rome C.Paris")
ans=input("Enter the option: ").upper()
if ans==list_ans[6]:
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pts+=10
     else:
        pts-=5
     print("8.Japan attacked which part of America, that pulled it to World
War II?")
     print("A.Pearl Harbour B.Hawaii C.Myrtle beach")
     ans=input("Enter the option:
                                   ").upper()
     if ans==list_ans[7]:
        pts+=10
     else:
        pts-=5
     print("9.According to Indian history, where did the Portugese come
first?")
     print("A.Pondicherry B.Mumbai C.Goa")
     ans=input("Enter the option:
                                   ").upper()
     if ans==list ans[8]:
        pts+=10
     else:
        pts-=5
     print("10.Which technology is used to record cryptocurrency?")
     print("A.Digital wallet B.Blockchain C.Token")
     ans=input("Enter the option: ").upper()
     if ans==list ans[9]:
        pts+=10
     else:
        pts=5
     print()
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print("Congratulations! You have completed your quiz and your score is
", pts, ".", sep="")
     if pts<100:
        print("The list of correct answers is given below:")
        print("1.7", "2.Octopus", "3.Pizza", "4.Horses", "5.12740", "6.Robert
Hooke","7.Paris","8.Pearl Harbour","9.Goa","10.Blockchain",sep="\n")
     inp=input("\n\nDo you want to play again? (Y/N): ").upper()
     if inp!="Y":
        break
#main program
print("Hey there! What's your name?")
name=input()
print("Hello ",name.upper(),".",sep="",end=" ")
print("Here are some fun games for you! Check out these to keep your
boredom away :)")
print("1.Random number guessing")
print("2.Pi value game")
print("3.Quiz")
print("4.Exit")
print()
print("ALL THE BEST")
while True:
  ch=int(input("Enter your choice (1/2/3/4):
                                                "))
  print()
  if ch==4:
     print("Aborting Program!")
     break
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elif ch==1:
     ran_no()
     print()
     print("Thank you for playing! Hope you had fun.")
     break
  elif ch==2:
     pi_value()
     print()
     print()
     print("Thank you for playing! Hope you had fun.")
     break
  elif ch==3:
     quiz()
     print()
     print("Thank you for playing! Hope you had fun.")
     break
  else:
     print("You have typed a wrong number! Enter again.")
print("Bye-bye, have a good day :)")
```