PROBLEM SOLVING WITH PROGRAMMING

QUIZ GAME

TEAM - 4

SECTION: A2

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INDEX

s.no	Title	Page.no
1.	Abstract	3
2.	Introduction	4
3.	Modules Description	5
4.	Implementation	7
5.	Test cases	40
6.	Conclusion	44

ABSTRACT:

The main aim of our project is to design a quiz game. Here we have several questions and the user gets a cash prize considering the individual answers. It is the game which tests the general knowledge of the user. The topic for the quiz can be science, sports, geography, movies or any other. The quiz will have questions connecting all the questions in the contest. There are two rounds in this game. If wrong answers are given there is no chance of going to next rounds. You will be asked questions continuously until you give the right answers. No negative marking will be given for wrong answers.

INTRODUCTION:

This is complete and error free quiz game mini project in c language designed as a simple console application. In this project, there are 2 levels.10 questions will be asked and the user is able to go to the next round only if he/she clears the first round. The user will be awarded marks for each question.

Modules/libraries included:

1. stdio.h:

printf: It is used to print the strings, integer, character etc on the outputscreen.

scanf: It reads the character, string, integer etc from the keyboard.

puts: It is used to write a line or string to the output stream that is upto ,but not include the null character.

fclose: It close the opened file

fopen : It opens the file and all file handling functions are defined in stdio.h header file.

fscanf: This function is used to read the formatted input from the given stream in c language.

fprintf: This function writes and formats the output stream. It is used to print the message but not on stdout console.

2. stdconio.h:

conio.h has many built in functions that are used to perform input and output functions from a c program.

getch: Avoids echo and takes characters directly from the console.

putch : Place the character on the console.

3.stdlib.h:

system	used to run another program	
_EXIT	terminates a program	
calloc	allocates memory at the runtime	
free	deallocates the memory	
malloc	loc allocates memory at the runtime	
realloc	reallocates the memory	

system() function in <stdlib.h>:

The system() is a part of the C standard library. It is used to pass commands that can be executed in the command processor or the terminal of the operating system, and finally returns the command after it has been completed.

Syntax:

IMPLEMENTATION:

Source Code:

```
#include<stdio.h>
#include<conio.h>
#include<ctype.h>
#include<stdlib.h>
#include<string.h>
void show_record();
void reset_score();
void help();
void edit_score(float , char []);
int main()
 {
         int countr,r,r1,count,i,n;
         float score;
         char choice;
         char playername[20];
         mainhome:
         system("cls");
         printf("\t\tC PROGRAM QUIZ GAME\n");
```

```
printf("\n\t\t_____");
 printf("\n\t\t WELCOME ");
 printf("\n\t\t to ");
 printf("\n\t\t THE GAME ");
 printf("\n\t\t_____");
 printf("\n\t\t_____");
 printf("\n\t\t BECOME A MILLIONAIRE!!!!!!!! ");
 printf("\n\t\t_____");
 printf("\n\t\t_____");
 printf("\n\t\t > Press S to start the game");
 printf("\n\t\t > Press V to view the highest score ");
printf("\n\t\t > Press R to reset score");
printf("\n\t\t > press H for help
                                  ");
printf("\n\t\t > press Q to quit
                                  ");
printf("\n\t\t____\n\n");
choice=toupper(getch());
if (choice=='V')
{
    show_record();
    goto mainhome;
}
 else if (choice=='H')
```

```
help();
           getch();
           goto mainhome;
     }
      else if (choice=='R')
      {
          reset_score();
          getch();
           goto mainhome;
      }
     else if (choice=='Q')
          exit(1);
      else if(choice=='S')
      {
            system("cls");
            gets(playername);
            system("cls");
         printf("\n------Welcome%stoCProgramQuizGame-------
",playername);
           printf("\n\n Here are some tips you might wanna know before playing:");
```

{

```
printf("\n >> There are 2 rounds in this Quiz Game, WARMUP ROUND & CHALLENGE
ROUND");
             printf("\n >> In warmup round you will be asked a total of 3 questions to test
your");
      printf("\n general knowledge. You are eligible to play the game if you give atleast 2");
             printf("\n right answers, otherwise you can't proceed further to the Challenge
Round.");
            printf("\n >> Your game starts with CHALLANGE ROUND. In this round you will be
asked a");
            printf("\n total of 10 questions. Each right answer will be awarded $100,000!");
            printf("\n By this way you can win upto ONE MILLION cash prize!!!!! .......");
            printf("\n >>You will be given 4 options and you have to press A, B ,C or D for
the");
            printf("\n right option.");
            printf("\n>>You will be asked questions continuously, till right answers are given");
            printf("\n >> No negative marking for wrong answers!");
            printf("\n\n\t!!!!!!!!! ALL THE BEST !!!!!!!!!!");
            printf("\n\n Press Y to start the game!\n");
            printf("\n Press any other key to return to the main menu!");
        if (toupper(getch())=='Y')
        {
              goto home;
       }
```

```
else
```

```
{
       goto mainhome;
       system("cls");
}
home:
system("cls");
count=0;
for(i=1;i<=3;i++)
{
       system("cls");
       r1=i;
       switch(r1)
}
case 1:
       printf("\n\nWhich of the following is a Palindrome number?");
       printf("\n\nA.42042\t\tB.101010\n\nC.23232\t\tD.01234");
if (toupper(getch())=='C')
{
       printf("\n\nCorrect!!!");
       count++;
       getch();
```

```
break;
       }
       else
      {
              printf("\n\nWrong!!! The correct answer is C.23232");
              `getch();
        break;
      }
     case 2:
              printf("\n\nThe country with the highest environmental performance index
is...");
              printf("\n\A.France\t\B.Denmark\n\nC.Switzerland\t\D.Finland");
     if (toupper(getch())=='C')
     {
              printf("\n\nCorrect!!!");
              count++;
              getch();
              break;
     }
      else
      {
              printf("\n\nWrong!!! The correct answer is C.Switzerland");
              getch();
```

```
break;
      }
      case 3:
              printf("\n\nWhich animal laughs like human being?");
              printf("\n\nA.Polar Bear\t\tB.Hyena\n\nC.Donkey\t\tD.Chimpanzee");
       if (toupper(getch())=='B')
      {
              printf("\n\nCorrect!!!");
               count++;
              getch();
               break;
      }
      else
      {
              printf("\n\nWrong!!! The correct answer is B.Hyena");
                     getch();
              break;
       }
       case 4:
              printf("\n\n\nWho was awarded the youngest player award in Fifa World Cup
2006?");
```

```
print f( \verb|"\n\a.WayneRooney| t \verb|\t.LucasPodolski| n \verb|\nC.LionelMessi| t \verb|\t.ChristianoRonal| results for the print of the print o
                                    do");
                                       if (toupper(getch())=='B')
                                    {
                                                                               printf("\n\nCorrect!!!");
                                                                                count++;
                                                                                getch();
                                                                                break;
                                     }
                                       else
                                {
                                                                             printf("\n\nWrong!!! The correct answer is B.Lucas Podolski");
                                                                             getch();
                                                                             break;
                                    }
                                     case 5:
                                                                                printf("\n\n\nWhich is the third highest mountain in the world?");
                                                                             printf("\n\nA.Mt.K2\t\tB.Mt.Kanchanjungha\n\nC.Mt.Makalu\t\tD.Mt.
Kilimanjaro");
                                          if (toupper(getch())=='B')
                                       {
                                                                          printf("\n\nCorrect!!!");
```

```
count++;
           getch();
           break;
    }
     else
    {
            printf("\n\nWrong!!! The correct answer is B.Mt. Kanchanjungha");
            getch();
            break;
    }
case 6:
            printf("\n\nWhat is the group of frogs known as?");
            printf("\nA.A traffic\tB.A toddler\nC.A police\tD.An Army");
if (toupper(getch())=='D' )
  {
            printf("\n\nCorrect!!!");
             count++;
   getch();
   break;
           }
  else
```

```
{
              printf("\n\nWrong!!! The correct answer is D.An Army");
              getch();
              break;
      }
      if(count>=2)
      {
             goto test;
      }
      else
      {
              system("cls");
             printf("\n\nSORRY YOU ARE NOT ELIGIBLE TO PLAY THIS GAME, BETTER LUCK
NEXT TIME");
              getch();
              goto mainhome;
      }
       test:
              system("cls");
              printf("\n\t^{**}\ CONGRATULATION\ \%s\ you\ are\ eligible\ to\ play\ the\ Game
**",playername);
              printf("\n\n\n\t!Press any key to Start the Game!");
```

```
if(toupper(getch())=='p')
{
       goto game;
 }
game:
countr=0;
for(i=1;i<=10;i++)
{
       system("cls");
       r=i;
         switch(r)
}
case 1:
       printf("\n\nWhat is the National Game of England?");
       printf("\n\A.Football\t\B.Basketball\n\nC.Cricket\t\tD.Baseball");
if (toupper(getch())=='C')
{
        printf("\n\nCorrect!!!");
        countr++;
        getch();
        break;
        getch();
```

```
}
else
{
       printf("\n\nWrong!!! The correct answer is C.Cricket");getch();
       goto score;
       break;
}
case 2:
       printf("\n\nStudy of Earthquake is called.....,");
       printf("\n\A.Seismology\t\B.Cosmology\n\nC.Orology\t\D.Etimology");
if (toupper(getch())=='A')
{
        printf("\n\nCorrect!!!");countr++;getch();
       break;
 }
else
{
       printf("\n\nWrong!!! The correct answer is A.Seismology");getch();
       goto score;
       break;
 }
```

```
case 3:
              printf("\n\n\nAmong the top 10 highest peaks in the world, how many lie in
Nepal? ");
              printf("\n\nA.6\t\tB.7\n\nC.8\t\tD.9");
       if (toupper(getch())=='C')
       {
              printf("\n\nCorrect!!!");countr++;getch();
              break;
        }
       else
       {
               printf("\n\nWrong!!! The correct answer is C.8");getch();
               goto score;
              break;
       }
        case 4:
              printf("\n\n\nThe Laws of Electromagnetic Induction were given by?");
              printf("\n\A.Faraday\t\B.Tesla\n\C.Maxwell\t\D.Coulomb");
       if (toupper(getch())=='A')
       {
               printf("\n\nCorrect!!!");countr++;getch();
               break;
       }
```

```
else
{
        printf("\n\nWrong!!! The correct answer is A.Faraday");getch();
        goto score;
        break;
}
case 5:
       printf("\n\n\nIn what unit is electric power measured?");
       printf("\n\nA.Coulomb\t\tB.Watt\n\nC.Power\t\tD.Units");
if (toupper(getch())=='B')
{
       printf("\n\nCorrect!!!");
       countr++;
       getch();
       break;
}
else
{
       printf("\n\nWrong!!! The correct answer is B.Power");
       getch();
       goto score;
       break;
```

```
}
case 6:
        printf("\n\n\Nhich element is found in Vitamin B12?");
        printf("\n\nA.Zinc\t\tB.Cobalt\n\nC.Calcium\t\tD.Iron");
 if (toupper(getch())=='B' )
 {
        printf("\n\nCorrect!!!");countr++;getch();
        break;
}
else
{
         printf("\n\nWrong!!! The correct answer is B.Cobalt");
         goto score;
         getch();
        break;
}
 case 7:
        printf("\n\nWhat is the National Name of Japan?");
        printf("\n\nA.Polska\t\tB.Hellas\n\nC.Drukyul\t\tD.Nippon");
if (toupper(getch())=='D')
 {
```

```
printf("\n\nCorrect!!!");
       countr++;
       getch();
       break;
}
else
{
       printf("\n\nWrong!!! The correct answer is D.Nippon");
       getch();
       goto score;
       break;
}
case 8:
       printf("\n\n\nHow many times a piece of paper can be folded at the most?");
       printf("\nA.6\tB.7\nC.8\tD.Depends on the size of paper");
if (toupper(getch())=='B')
{
        printf("\n\nCorrect!!!");
        countr++;
        getch();
        break;
```

```
}
else
{
        printf("\n\nWrong!!! The correct answer is B.7");
        getch();
        goto score;
        break;
}
case 9:
        printf("\n\n\nWhat is the capital of Denmark?");
        printf("\n\nA.Copenhagen\t\tB.Helsinki\n\nC.Ajax\t\tD.Galatasaray");
 if (toupper(getch())=='A')
 {
        printf("\n\nCorrect!!!");
        countr++;
        getch();
        break;
}
 else
  {
        printf("\n\nWrong!!! The correct answer is A.Copenhagen");
       getch();
```

```
goto score;
       break;
}
case 10:
       printf("\n\nWhich is the longest River in the world?");
       printf("\n\nA.Nile\t\tB.Koshi\n\nC.Ganga\t\tD.Amazon");
if (toupper(getch())=='A')
 {
       printf("\n\nCorrect!!!");
       countr++;
       getch();
       break;
}
else
{
       printf("\n\nWrong!!! The correct answer is A.Nile");
       getch();
       break;
       goto score;
  }
 case 11:
```

```
printf("\n\n\nWhat is the color of the Black Box in aeroplanes?");
        printf("\n\nA.White\t\tB.Black\n\nC.Orange\t\tD.Red");
if (toupper(getch())=='C')
{
        printf("\n\nCorrect!!!");
        countr++;
        getch();
        break;
}
else
 {
        printf("\n\nWrong!!! The correct answer is C.Orange");
        getch();
               break;
        goto score;
}
 case 12:
        printf("\n\n\nWhich city is known at 'The City of Seven Hills'?");
        printf("\n\nA.Rome\t\tB.Vactican City\n\nC.Madrid\t\tD.Berlin");
 if (toupper(getch())=='A')
{
        printf("\n\nCorrect!!!");
```

```
countr++;
        getch();
        break;
}
 else
{
        printf("\n\nWrong!!! The correct answer is A.Rome");
        getch();
        break;
        goto score;
}
 case 13:
        printf("\n\n\nName the country where there no mosquitoes are found?");
        printf("\n\nA.Japan\t\tB.Italy\n\nC.Argentina\t\tD.France");
 if (toupper(getch())=='D')
 {
        printf("\n\nCorrect!!!");
        countr++;
        getch();
        break;
}
```

```
else
       {
              printf("\n\nWrong!!! The correct answer is D.France");
              getch();
              break;
              goto score;
       }
       case 14:
              printf("\n\n\nWho is the author of 'Pulpasa Cafe'?");
printf("\n\nA.NarayanWagle\t\tB.LalGopalSubedi\n\nC.B.P.Koirala\t\tD.KhageSangraula");
       if (toupper(getch())=='A')
       {
              printf("\n\nCorrect!!!");
              countr++;
              getch();
              break;
       }
       else
       {
              printf("\n\nWrong!!! The correct answer is A.Narayan Wagle");
              getch();
              break;
```

```
goto score;
}
case 15:
       printf("\n\n\nWhich Blood Group is known as the Universal Recipient?");
       printf("\n\nA.A\t\tB.AB\n\nC.B\t\tD.O");
  if (toupper(getch())=='B')
  {
       printf("\n\nCorrect!!!");
       countr++;
       getch();
       break;
   }
   else
  {
       printf("\n\nWrong!!! The correct answer is B.AB");
       getch();
       goto score;
       break;
   }
  case 16:
       printf("\n\n\NHat is the unit of measurement of distance between Stars?");
       printf("\n\nA.Light Year\t\tB.Coulomb\n\nC.Nautical Mile\t\tD.Kilometer");
```

```
if (toupper(getch())=='A')
{
     printf("\n\nCorrect!!!");
     countr++;
     getch();
     break;
  }
   else
   {
       printf("\n\nWrong!!! The correct answer is A.Light Year");
       getch();
       goto score;
        break;
   }
   case 17:
      printf("\n\n\nThe country famous for Samba Dance is......");
      printf("\n\nA.Brazil\t\tB.Venezuela\n\nC.Nigeria\t\tD.Bolivia");
if (toupper(getch())=='A')
  {
             printf("\n\nCorrect!!!");
             countr++;
             getch();
```

```
}
            else
             {
                     printf("\n\nWrong!!! The correct answer is A.Brazil");
                      getch();
                      goto score;
                      break;
              }
               case 18:
                      printf("\n\n\nWind speed is measure by____?");
                      printf("\n\nA.Lysimeter\t\B.Air
vane \\ \n C. Hydrometer \\ \t D. An emometer \\ \n ");
               if (toupper(getch())=='D')
              {
                      printf("\n\nCorrect!!!");
                      countr++;
                      getch();
                      break;
              }
              else
             {
                      printf("\n\nWrong!!! The correct answer is D.Anemometer");
```

break;

```
getch();
                     goto score;
                     break;
             }
             case 19:
                     printf("\n\nWhich city in the world is popularly known as The City of
Temple?");
                     printf("\n\Delta.Delhi\tB.Bhaktapur\n\C.Kathmandu\tD.Agra\n\");
              if (toupper(getch())=='C')
             {
                     printf("\n\nCorrect!!!");
                     countr++;
                     getch();
                     break;
              }
             else
             {
                     printf("\n\nWrong!!! The correct answer is C.Kathmandu");
                     getch();
                    goto score;
                     break;
             }
             case 20:
```

```
printf ("\n\n\nWhich hardware was used in the First Generation
Computer?");
                      printf("\n\nA.Transistor\t\tB.Valves\n\nC.I.C\t\tD.S.S.I");
              if (toupper(getch())=='B')
           {
                     printf("\n\nCorrect!!!");
                     countr++;
                     getch();
                     break;
            }
           else
           {
                     printf("\n\nWrong!!! The correct answer is B.Valves");
                     getch();
                     goto score;
                     break;
            }
            case 21:
                    printf("\n\n\nOzone plate is being destroyed regularly because of___?");
                     printf("\nA.L.P.G\tB.Nitrogen\nC.Methane\tD.C.F.C");
           if (toupper(getch())=='D')
           {
                     printf("\n\nCorrect!!!");
```

```
getch();
                           break;
                 }
                 else
                {
                           printf("\n\nWrong!!! The correct answer is D. C.F.C");
                           getch();
                           goto score;
                           break;
                 }
                case 22:
                          printf("\n\nWho won the Women's Australian Open Tennis in 2007?");
print f( "\nA.Martina Hingis\t B.Maria Sarapova\n C.Kim Clijster\t D.Serena Williams");
              if (toupper(getch())=='D')
                {
                           printf("\n\nCorrect!!!");
                           countr++;
                           getch();
                           break;
                 }
```

countr++;

```
else
             {
                     printf("\n\nWrong!!! The correct answer is D.Serena Williams");
                      getch();
                      goto score;
                      break;
              }
              case 23:
                     printf("\n\n\nWhich film was awarded the Best Motion Picture at Oscar in
2010?");
                    printf("\n\nA.The Secret in their Eyes\t\tB.Shutter Island\n\nC.The King's
speech\t\tD.The Reader");
         if (toupper(getch())=='C')
         {
                    printf("\n\nCorrect!!!");
                     countr++;
                    getch();
                    break;
            }
            else
             {
                             printf("\n\nWrong!!! The correct answer is C.The King's Speech");
                             getch();
```

```
goto score;
                   break;
                   }
            }
     }
score:
system("cls");
score=(float)countr*100000;
if(score>0.00 && score<1000000)
{
             printf("\n\n\t\t****** CONGRATULATION *******");
             printf("\n\t You won $%.2f",score);
            goto go;
}
else if(score==1000000.00)
{
            printf("\n\n\t\t^{*****} CONGRATULATION ******");
            printf("\n\t\t\t YOU ARE A MILLIONAIRE!!!!!!!");
            printf("\n\t\t You won $%.2f",score);
            printf("\t\t Thank You!!");
}
else
```

```
{
              printf("\n\n\t**** SORRY YOU DIDN'T WIN ANY CASH ****");
              printf("\n\t\t Thanks for your participation");
              printf("\n\t\t TRY AGAIN");
              goto go;
   }
   go:
              puts("\n\n Press Y if you want to play next game");
              puts(" Press any key if you want to go main menu");
 if (toupper(getch())=='Y')
              goto home;
 else
   {
              edit_score(score,playername);
              goto mainhome;
    }
       }
  }
void show_record()
{
            system("cls");
```

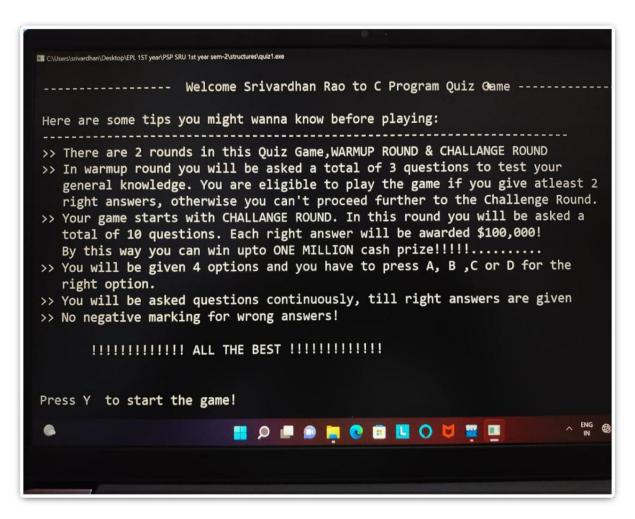
```
char name[20];
           float scr;
           FILE *f;
           f=fopen("score.txt","r");
           fscanf(f,"%s%f",&name,&scr);
           printf("\n\n\t\t**************);
           printf("\n\n\t\t %s has secured the Highest Score %0.2f",name,scr);
           printf("\n\n\t\t***************);
           fclose(f);
           getch();
}
void reset_score()
{
               system("cls");
               float sc;
              char nm[20];
              FILE *f;
              f=fopen("score.txt","r+");
              fscanf(f,"%s%f",&nm,&sc);
              sc=0;
              fprintf(f,"%s,%.2f",nm,sc);
              fclose(f);
```

```
}
      void help()
      {
        system("cls");
        printf("\n\n
                                HELP");
        printf("\n -----");
        printf("\n ...... C program Quiz Game.....");
        printf("\n >> There are two rounds in the game, WARMUP ROUND & CHALLANGE
ROUND");
        printf("\n >> In warmup round you will be asked a total of 3 questions to test your
general");
        printf("\n knowledge. You will be eligible to play the game if you can give atleast 2");
        printf("\n right answers otherwise you can't play the Game.....");
        printf("\n >> Your game starts with the CHALLANGE ROUND. In this round you will be
asked");
        printf("\n total 10 questions each right answer will be awarded $100,000.");
        printf("\n By this way you can win upto ONE MILLION cash prize in USD. .....");
        printf("\n >> You will be given 4 options and you have to press A, B, C or D for the");
        printf("\n right option");
        printf("\n >> You will be asked questions continuously if you keep giving the right
answers.");
        printf("\n >> No negative marking for wrong answers");
```

```
printf("\n\n\t*******BEST OF LUCK**********);
        printf("\n\n\t**C PROGRAM QUIZ GAME is developed by CODE WITH Srivardhan
team***");
      }
      void edit_score(float score, char plnm[20])
      {
        system("cls");
        float sc;
        char nm[20];
        FILE *f;
        f=fopen("score.txt","r");
        fscanf(f,"%s%f",&nm,&sc);
        if (score>=sc)
        {
               sc=score;
          fclose(f);
          f=fopen("score.txt","w");
          fprintf(f,"%s\n%.2f",plnm,sc);
          fclose(f);
         }
      }
```

TEST CASES:







Which animal laughs like human being?

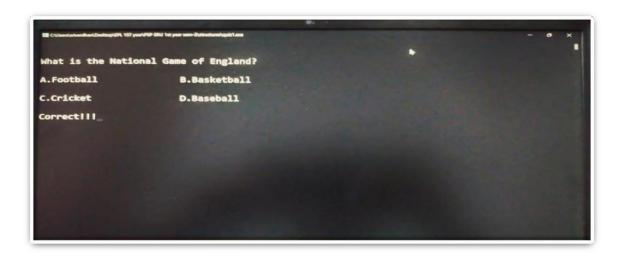
A.Polar Bear B.Hyena

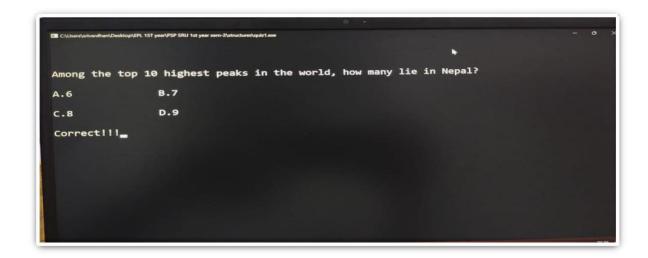
C.Donkey D.Chimpanzee_



```
#* CONGRATULATION Srivardhan Rao you are eligible to play the Game **

!Press any key to Start the Game!
```





The Laws of Electromagnetic Induction were given by?

A.Faraday

B.Tesla

C.Maxwell

D.Coulomb

Correct!!!





CONCLUSION:

This online quiz application provides facility to play quiz anywhere and anytime it save time since user does need to wait for result. So student/user cannot wait for the result All Student/ user get extra knowledge and skills. Administrator has a privilege to put as much as question in any category given in application. User can register, log-in, and give the test with his/her specific id, and can see the results as well.