

KHWOPA SECONDARY SCHOOL
DEPARTMENT OF COMPUTER SCIENCE
Dekocha-06, BHAKTAPUR



A FINAL REPORT

ON

“QUIZ GAME USING C”

A Report Submitted for the partial fulfilment of requirement for the degree of NEB

in computer science

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Submitted To:

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UNDER THE GUIDANCE OF

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DEPARTMENT OF COMPUTER SCIENCE
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DEKOCHA-06, BHAKTAPUR

CERITFICATE

This is to certify that the project entitled “Programming with C” submitted by Miss Samriddhi Prajapati, Miss Nirjala Duwal, Mr Anuj Thapa Magar, Mr Kritan Shyaula & Mr Sanik Karmacharya in apartial fulfillment of the requirements for the internal marks of Computer science in NEB (Nepal Education Board) Class 12 (XII), is a bonafide work to the best of my/our knowledge and may be placed before the examination board for their considerarion.

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ABSTRACT

This project is constructed by using C programming language. This a simple quiz game which we have constructed using functions, structure, file handling etc. through the theoretical knowledge of C programming and studying various keywords, functions of C programming we have able to made this quiz game. This is a simple game where user need to choose the correct option for scoring.

This project mainly focused on how we can implement the C programming in a realistic way based on theoretical knowledge.

Taking the knowledge of syntax of structure, file handling, functions with its application helps us to develop the overall project. We have learned how we can implement the C programming in a realistic manner by typing and playing with the codes.

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INTRODUCTION

1.1. BACKGROUND

Technology is rapidly increasing in today's world. Internet is one of the rapidly increasing technologies. The use and user are increasing day by day. Nowadays, people are using internet for communication, collaboration, and many others things that done online. With the development of internet, computer programming is also developed rapidly in the modern era. Computer Programming is the fundamental skills for so many different applications, not just software development or cutting-edge research into artificial intelligence. Through the help of computer programming we can do research and development, government operations, web development and designs, marketing and business operations, data science and artificial intelligence, cyber security etc.

In the world of programming, we have visualize a small project based on c programming code and we have designed a simple quiz game. Getting the theoretical knowledge from the classroom, we designed a simple demonstration of the use of structure, functions, file handling in the program.

1.2. OBJECTIVES

- To familiar with the use of c programming in realistic manner
- To learn how to use structure, pointer, file handling in the program
- To be able to design a simple application by use of c codes

1.3. APPLICATIONS

- To show how the code really works
- To provide general knowledge about c programming
- To demonstrate that how coding is important in modern era

1.4. SCOPE AND LIMITATIONS

The first and foremost things are our country is lacking on the development of internet and skilled programmers. So the scope of our project is to make everyone an eligible programmer and able to design software, applications in our own country.

The limitations are people don't have computers in their home to practice programming and familiarized with it.

2.METHODOLOGY

The quiz game is designed using functions, structure and file handling.

- ❖ On the basis of functions used in the program

I).We have use library functions like start(); , help(); ,high score(); etc. Like

The int start(); int help(); and int high score(); are the function prototype that gives information about the type of the value returned, the name of the function and the number and the type of arguments that must be supplied in function call.

II).Calling functions are start(); , help(); ,high score(); etc.

III).And the function definition which is followed by function body. It contains the value returned by the function followed function name.

- ❖ On the basis of structure used in the program

We use structure to hold dissimilar data items as single units. A member of structure can be accessed by using period (.) sign between structure variable and respective member. We use the array of structure for holding collection of structure variable having same set of members.

- ❖ Based on the file handling used in the program

fopen():To create a new data file

fclose():To close data file

fprintf():To write formatted data to data file

fscanf():To read formatted data from data file

The modes used in the program are:

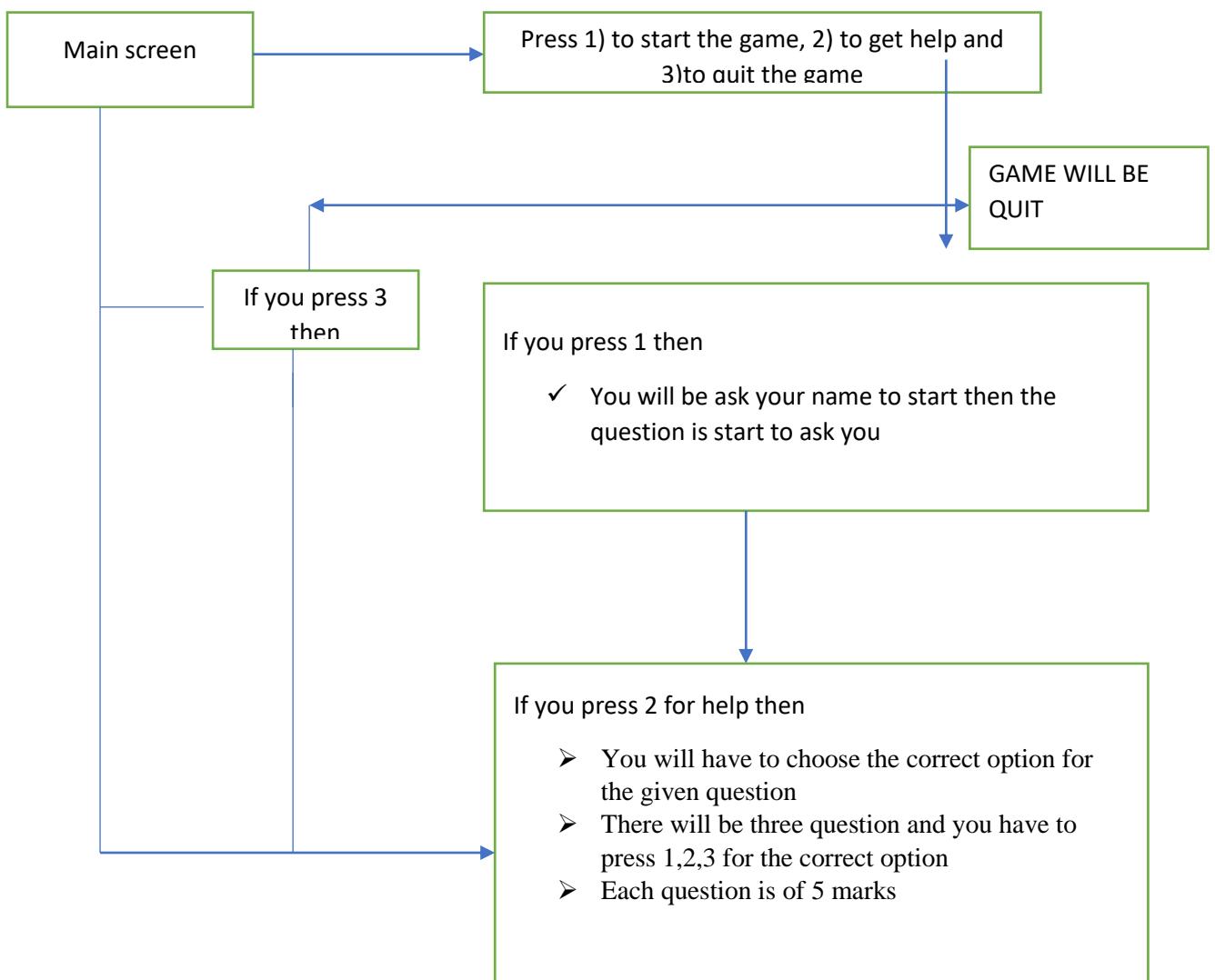
r :open an existing file for reading

w:open a new file for writing

Some control structure used in program is

- 1) Conditional statements like if statement , if else statement if else if statements
- 2) Switch statements
- 3) Looping(while loop)
- 4) assignment operator(=) and conditional operator(==,>,<)

I. BLOCK DIAGRAM



TOOLS AND PLATFORM

We have use Dev C++ for coding the overall game which is the most downloaded application or platform for coding. The new version of dev C++ is highly sophisticated, compiling and running is very fast and error is also shown with the reason in each line.

The overall project can be typing in Ms Word which is the most powerful text documenting application.

3. DISCUSSION AND CONCLUSION

I. DISCUSSION

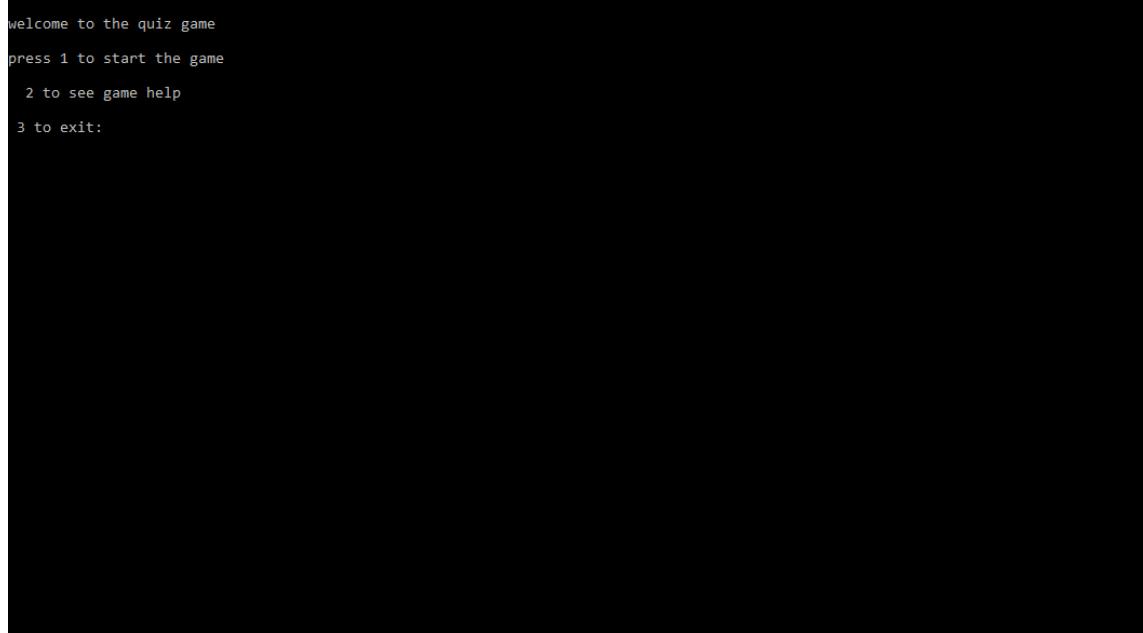
By doing the project of C programming, we are able to make a simple quiz game. In this project we able to provide the information related on how we can handle various file handling, structure in c program.

II.CONCLUSION

In conclusion, the basic quiz game project in C provides a simple yet functional platform for users to test their knowledge. With a minimalistic design, the game offers a straightforward interface, smooth navigation, and immediate feedback on user responses. Despite its simplicity, the project demonstrates key programming principles and serves as an accessible introduction to C programming for quiz game development.

4. APPENDIX

- This is the main screen that appears at the first after compiling and running the program.



```
welcome to the quiz game
press 1 to start the game
2 to see game help
3 to exit:
```

- This is the next screen after we press 1 to start the game and you will be asked to enter your name then the questions will appear as followed:

```
welcome to the quiz game
press 1 to start the game
2 to see game help
3 to exit:
1
here the question given
enter your name:
ram
-----
1.What is the full form of WAN?
1)World Area Network          2)Wide Association Network      3)
Wide Area Network
select option:
3

your answer is correct
-----
2.Which mode is used to read existing file?
1)w           2)r           3)
a           4)
a++
select option:
2

your answer is correct
-----
3.Which topology is more reliable and secured for a LAN?
1)Star         2)Bus         3)
Ring         4)Mesh
select option:
1
```

I. APPENDIX -2

- This is the next screen after completing all the questions and the total score, points, rated are shown as follows:

```
your answer is correct

-----
5.For a typical program,the input is taken using?
 1)scanf          2)Files          3)
Command-line      4)All of the above
select option:
1

your answer is correct

-----
your score is 25 points
Dear ram your score is 25 points
Correct answer=5
Wrong answer=0
You are rated 3
-----
Process exited after 30.26 seconds with return value 0
Press any key to continue . . . -
```

- This is the screen when we press 2 from keyword that shows the help options about the game and if we press 1 then the game will again continue.

```
welcome to the quiz game
press 1 to start the game
 2 to see game help
 3 to exit:
2

*****Game Help*****You will have to choose the correct option for the given question
There will be three options and you have to press 1,2 or 3 for the right option
Each question is of 5 marks
enter 1 if you want to continue playing:
-
```

II. APPENDIX- 3

- This is the program code to develop the quiz game .

File Edit Search View Project Execute Tools AStyle Window Help

(globals)

Project Classes Debug

```
programcode.cc
1 #include<stdio.h>
2 #include<stdlib.h>
3 #include<conio.h>
4 struct play{
5     char name[20];
6     int score=0;
7     int rat;
8 }s;
9 int start();
10 int help();
11 int highscore();
12 int main()
13 {
14     int ch=0;
15     printf("\nwelcome to the quiz game\n");
16     printf("1 to start the game\n\n 2 to see game help\n\n 3 to exit:\n\n");
17     scanf("%d",&ch);
18     switch(ch){
19         case 1:
20             start();
21             break;
22         case 2:
23             help();
24             break;
25         default:
26             exit(1);
27     }
28     int help(){
29         int ch;
30         printf("\n\n*****Game Help*****");
31         printf("You will have to choose the correct option for the given question\n\n");
32         printf("There will be three options and you have to press 1,2 or 3 for the right option\n\n");
33         printf("Each question is of 5 marks\n\n");
34         printf("enter 1 if you want to continue playing:\n");
35         scanf("%d",&ch);
36         if(ch==1){
37             start();
38         }
39     }
40 }
```

Line: 50 Col: 23 Sel: 0 Lines: 177 Length: 4728 Insert Done parsing in 0.032 seconds

File Edit Search View Project Execute Tools AStyle Window Help

(globals)

Project Classes Debug

```
programcode.cc
29 int ch;
30 printf("\n\n*****Game Help*****");
31 printf("You will have to choose the correct option for the given question\n\n");
32 printf("There will be three options and you have to press 1,2 or 3 for the right option\n\n");
33 printf("Each question is of 5 marks\n\n");
34 printf("enter 1 if you want to continue playing:\n");
35 scanf("%d",&ch);
36 if(ch==1){
37     start();
38 }else{
39     exit(1);
40 }
41 int start(){
42     int ans;
43     int correct;
44     int wrong=0;
45     char name[20];
46     printf("Where the question given\n");
47     char q1[100] = "1.What is the full form of WAN?";
48     char option1[100] = "\n 1)Wide Area Network\t 2)Wide Association Network\t 3)\nWide Area Network\t\t";
49     char q2[100] = "2.Which mode is used to read existing file?";
50     char option2[100] = "\n 1)\t 2)\t 3)\t 4)na++\t\t";
51     char q3[100] = "3.Which topology is more reliable and secured for a LAN?";
52     char option3[100] = "\n 1)Star\t 2)Bus\t 3)Ring\t 4)Mesh\t\t";
53     char q4[100] = "4.Give an example of full duplex mode of data communication?";
54     char option4[100] = "\n 1)Television\t 2)FM radio\t 3)Walkie-Talkie\t 4)Internet\t\t";
55     char q5[100] = "5.For a typical program, the input is taken using?";
56     char option5[100] = "\n 1)scanf\t 2)Files\t 3)Command-line\t 4)All of the above\t\t";
57     FILE *fp;
58     fp=fopen("type.txt","w");
59     printf("enter your name:\n");
60     scanf("%s",s.name);
61     printf("-----\n");
62     fprintf(fp,"%s",s.name);
63     printf(q1);
64     printf(option1);
65     printf(option2);
66 }
```

Line: 50 Col: 23 Sel: 0 Lines: 177 Length: 4728 Insert Done parsing in 0.032 seconds

III. APPENDIX -4

- This program is done in Dev C++ which is the popular platform for C programming.

File Edit Search View Project Execute Tools AStyle Window Help

(globals)

Project Classes Debug

```

57     char q5[100] = "5. For a typical program, the input is taken using?";
58     char option5[100] = "\n 1) scanf( )\n 2) Files\n 3) Command-line\n 4) All of the above";
59     FILE *fp;
60     fp=fopen("type.txt","w");
61     printf("enter your name:\n");
62     scanf("%s",s.name);
63     printf("-----\n\n");
64     fprintf(fp,"%s",s.name);
65     printf(q1);
66     printf(option1);
67     scanf("\n%d",&ans);
68     if(ans==3){
69         printf("\n\nyour answer is correct\n\n");
70         s.score=s.score+1;
71         ++correct;
72     }
73     else{
74         printf("\nwrong answer\n");
75         wrong++;
76     }
77     printf("-----\n\n");
78     printf(q2);
79     printf(option2);
80     scanf("\n%d",&ans);
81     if(ans==2){
82         printf("\n\nyour answer is correct\n\n");
83         s.score=s.score+1;
84         ++correct;
85     }
86     else{
87         printf("\nwrong answer\n");
88         wrong++;
89     }
90     printf("-----\n\n");
91     printf(q3);
92     printf(option3);
93     scanf("\n%d",&ans);
94     if(ans==1){
95         printf("\n\nyour answer is correct\n\n");
96         s.score=s.score+1;
97         ++correct;
98     }
99     else{
100        printf("\nwrong answer\n");
101       wrong++;
102    }
103    printf("-----\n\n");
104    printf(q4);
105    printf(option4);
106    scanf("\n%d",&ans);
107    if(ans==4){
108        printf("\n\nyour answer is correct\n\n");
109        s.score=s.score+1;
110        ++correct;
111    }
112    else{
113        printf("\nwrong answer\n");
114        wrong++;
115    }
116    printf("-----\n\n");
117
118
119
120

```

Line: 74 Col: 14 Sel: 0 Lines: 177 Length: 4728 Insert Done parsing in 0.032 seconds

File Edit Search View Project Execute Tools AStyle Window Help

(globals)

Project Classes Debug

```

83     if(ans==2){
84         printf("\n\nyour answer is correct\n\n");
85         s.score=s.score+1;
86         ++correct;
87     }
88     else{
89         printf("\nwrong answer\n");
90         wrong++;
91     }
92     printf("-----\n\n");
93     printf(q3);
94     printf(option3);
95     scanf("\n%d",&ans);
96     if(ans==1){
97         printf("\n\nyour answer is correct\n\n");
98         s.score=s.score+1;
99         ++correct;
100    }
101    else{
102        printf("\nwrong answer\n");
103        wrong++;
104    }
105    printf("-----\n\n");
106    printf(q4);
107    printf(option4);
108    scanf("\n%d",&ans);
109    if(ans==4){
110        printf("\n\nyour answer is correct\n\n");
111        s.score=s.score+1;
112        ++correct;
113    }
114    else{
115        printf("\nwrong answer\n");
116        wrong++;
117    }
118    printf("-----\n\n");
119
120

```

Line: 74 Col: 14 Sel: 0 Lines: 177 Length: 4728 Insert Done parsing in 0.032 seconds

IV. APPENDIX-5

```

113     s.score=s.score+1;
114     ++correct;
115 }
116 else{
117     printf("\nwrong answer\n");
118     wrong++;
119 }
120 printf("-----\n\n");
121 printf(q5);
122 printf(option5);
123 printf("select option:\n");
124 scanf("\n%d",&ans);
125 if(ans==1){
126     printf("\nyour answer is correct\n\n");
127     s.score=s.score+1;
128     ++correct;
129 }
130 else{
131     printf("\nwrong answer\n");
132     wrong++;
133 }
134 printf("-----\n\n");
135 fprintf(fp,"%s\n",q1,option1);
136 fprintf(fp,"%s\n",q2,option2);
137 fprintf(fp,"%s\n",q3,option3);
138 fprintf(fp,"%s\n",q4,option4);
139 fprintf(fp,"%s\n",q5,option5);
140 if(correct>0){
141     printf("your score is %d points",correct*5);
142     s.score=correct*5;
143     if(s.score>10){
144         s.rat=3;
145     }
146     else if(s.score>5){
147         s.rat=2;
148     }
149     else if(s.score<10){
150         s.rat=1;
151     }
152 }
153 printf("\nDear %s your score is %d points\n",s.name,correct*5);
154 printf("\nCorrect answer=%d",correct);
155 printf("\nWrong answer=%d",wrong);
156 printf("\nYou are rated %d",s.rat);
157 printf(fp,"\\nDear %s you have scored %d. \\nYou are rated %d",s.name,s.score,s.rat);
158 }
159 else{
160     fprintf(fp,"Dear %s please try again!!!",s.name);
161     printf("\\n\\nDear %s please try again!!!",s.name);
162 }
163 fclose(fp);
164
165 int highscore(){
166     FILE *fp;
167     fp=fopen("type.txt","r");
168     printf("name and points, rating:");
169     while(fscanf(fp,"%s%d",s.name,&s.score,&s.rat)!=EOF){
170         printf("Dear %s you have scored %d.\\n You are rated %d",s.name,s.score,s.rat);
171     }
172 }

```

Line: 74 Col: 14 Sel: 0 Lines: 177 Length: 4728 Insert Done parsing in 0.032 seconds

```

135 fprintf(fp,"%s\n",q1,option1);
136 fprintf(fp,"%s\n",q2,option2);
137 fprintf(fp,"%s\n",q3,option3);
138 fprintf(fp,"%s\n",q4,option4);
139 fprintf(fp,"%s\n",q5,option5);
140 if(correct>0){
141     printf("your score is %d points",correct*5);
142     s.score=correct*5;
143     if(s.score>10){
144         s.rat=3;
145     }
146     else if(s.score>5){
147         s.rat=2;
148     }
149     else if(s.score<10){
150         s.rat=1;
151     }
152 }
153 printf("\nDear %s your score is %d points\n",s.name,correct*5);
154 printf("\nCorrect answer=%d",correct);
155 printf("\nWrong answer=%d",wrong);
156 printf("\nYou are rated %d",s.rat);
157 printf(fp,"\\nDear %s you have scored %d. \\nYou are rated %d",s.name,s.score,s.rat);
158 }
159 else{
160     fprintf(fp,"Dear %s please try again!!!",s.name);
161     printf("\\n\\nDear %s please try again!!!",s.name);
162 }
163 fclose(fp);
164
165 int highscore(){
166     FILE *fp;
167     fp=fopen("type.txt","r");
168     printf("name and points, rating:");
169     while(fscanf(fp,"%s%d",s.name,&s.score,&s.rat)!=EOF){
170         printf("Dear %s you have scored %d.\\n You are rated %d",s.name,s.score,s.rat);
171     }
172 }

```

Line: 74 Col: 14 Sel: 0 Lines: 177 Length: 4728 Insert Done parsing in 0.032 seconds

V. APPENDIX-6

The screenshot shows a C IDE interface with the following details:

- Menu Bar:** File, Edit, Search, View, Project, Execute, Tools, AStyle, Window, Help.
- Toolbar:** Includes icons for file operations like Open, Save, Print, and Build.
- Project Explorer:** Shows a project named "globals".
- Code Editor:** The file "programcode.cc" is open, containing C code for file handling. The code includes conditional statements for reading from and writing to a file named "type.txt". It also includes a function to calculate a high score.
- Status Bar:** Displays "Line: 74 Col: 14 Sel: 0 Lines: 177 Length: 4728 Insert Done parsing in 0.032 seconds".

- This is the screen of file handling in which it is write and read in another file of the program code through the use of `fp=fopen("type.txt","w")`.

The screenshot shows a terminal window with the following details:

- Menu Bar:** File, Edit, Format, View, Help.
- Text Area:**

```
ram1.What is the full form of WAN?
1)World Area Network      2)Wide Association Network      3)
Wide Area Network          2.Which mode is used to read existing file?

1)W          2)r          3)
a++          4)
a++ 3.Which topology is more reliable and secured for a LAN?

1)Star      2)Bus      3)          4.Give an example of full duplex mode of data communication?

1)Television      2)FM radio      3)
Walkie-Talkie      4)Internet      5.For a typical program,the input is taken using?

1)scanf      2)Files      3)
Command-line      4>All of the above

Dear ram you have scored 25.
You are rated 3
```

5. REFERENCE

- 1) <https://www.c.sharpcorner.com/code/2067/quiz-game-in-c.aspx>
- 2) Buddha publication computer book class 12
- 3) <https://www.studytonight.com>