

MAJOR PROJECT IN C PROGRAMMING:

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TOPIC - KAUN BANEGA CROREPATI
GAME

1. Project report.

- **Objective**
- The main objective of this project is to create a quiz-based game similar to the popular TV show **KBC**, using the C programming language. The project helps in understanding **decision making, loops, arrays, strings, and timers** in real-life applications.

2. Project Description

- This project is a console-based quiz game where the player answers **multiple-choice questions** to win increasing levels of prize money. The player has **two lifelines**:
- **Lifelines**:
- **50-50 Lifeline** – Removes two wrong options.
- **Skip Lifeline** – Allows player to skip one question without penalty.
- The game uses a **timer** to measure how long the player takes to answer each question. If the player answers incorrectly, the game ends immediately.

3. Features

- 12 MCQ questions
- Timer showing seconds taken
- Prize money increases at each level
- 50-50 lifeline
- Skip lifeline
- Displays correct/wrong answers
- Final score summary
- User-friendly interface

4 . Technologies Used

- **Language:** C Programming
- **Compiler:** GCC / Turbo C / VS Code
- **Concepts Used:**
 - Arrays
 - Strings
 - Loops
 - Conditions (if-else)
 - Functions
 - Time handling (`time()` and `difftime()`)

5. Working of the Game (Flow).

- Program starts → User enters name
- Instructions and lifelines explained
- Each question is shown with 4 options
- User answers or uses lifeline
- Timer calculates answer time
- Correct answer → money increases
- Wrong answer → game ends
- After 12 questions → final summary displayed

CODE .

```
arrays > KBC GAME > C quiz1.c > main()
1 #include <stdio.h>
2 #include <stdlib.h>
3 #include <string.h>
4 #include <time.h>
5
6 void line() {
7     printf("\n-----\n");
8 }
9
10 int main() {
11     char name[50];
12     int answer, correct = 0;
13     int used5050 = 0, usedSkip = 0;
14
15     long prizeMoney[] = {0, 1000, 5000, 10000, 20000, 40000, 80000,
16                          160000, 320000, 640000, 1250000, 2500000,
17                          5000000};
18
19     printf("\n***** WELCOME TO KAUN BANEGA CROREPATI *****\n");
20     printf("Enter your Name: ");
21     scanf("%s", name);
22
23     line();
24     printf("Hello %s! You have 2 lifelines:\n", name);
25     printf("1. 50-50 (Removes 2 wrong options)\n");
26     printf("2. Skip Question (No loss, move to next question)\n");
27     line();
```

```
19 // 12 Questions
20 char *questions[] = {
21     "Which planet is known as the Red Planet?", // 1
22     "Who is the father of C Language?", // 2
23     "Which device measures temperature?", // 3
24     "Who wrote the National Anthem of India?", // 4
25     "Which is the largest mammal?", // 5
26     "What is the capital of Australia?", // 6
27     "Which gas is used by plants during photosynthesis?", // 7
28     "Who discovered gravity?", // 8
29     "Which is the fastest animal on land?", // 9
30     "Who invented the telephone?", // 10
31     "What is the national currency of Japan?", // 11
32     "Which is the longest river in the world?" // 12
33 };
34
35 // Options for each question
36 char *options[][4] = {
37     {"1. Earth", "2. Mars", "3. Jupiter", "4. Venus"}, // 1
38     {"1. Dennis Ritchie", "2. Bill Gates", "3. Bjarne Stroustrup", "4. Charles Babbage"}, // 2
39     {"1. Barometer", "2. Thermometer", "3. Ammeter", "4. Speedometer"}, // 3
40     {"1. Benim Chandra", "2. Rabindranath Tagore", "3. Gandhi Ji", "4. Nehru Ji"}, // 4
41     {"1. Blue Whale", "2. Elephant", "3. Giraffe", "4. Shark"}, // 5
42     {"1. Sydney", "2. Canberra", "3. Melbourne", "4. Perth"}, // 6
43     {"1. Oxygen", "2. Carbon Dioxide", "3. Nitrogen", "4. Hydrogen"}, // 7
44     {"1. Newton", "2. Einstein", "3. Galileo", "4. Edison"}, // 8
45     {"1. Cheetah", "2. Tiger", "3. Lion", "4. Leopard"}, // 9
46     {"1. Alexander Graham Bell", "2. Edison", "3. Einstein", "4. Tesla"}, // 10
47     {"1. Yen", "2. Won", "3. Dollar", "4. Euro"}, // 11
48     {"1. Nile", "2. Amazon", "3. Ganga", "4. Yangtze"} // 12
49 };
50
51 // Correct Answers
52 int correctOption[] = {2, 1, 2, 2, 1, 2, 2, 1, 1, 1, 1, 1};
53
54 // 50-50 wrong option sets
55 int fifty1[] = {1, 2, 1, 1, 2, 1, 1, 2, 2, 2, 2, 2};
56 int fifty2[] = {3, 4, 3, 4, 3, 4, 3, 4, 4, 4, 4, 3};
```

#CODE

```
58 int totalQuestions = 12;
59
60 for (int i = 0; i < totalQuestions; i++) {
61     line();
62     printf("\nQ%d: %s\n", i + 1, questions[i]);
63
64     for (int j = 0; j < 4; j++)
65         printf("%s\n", options[i][j]);
66
67     printf("\nYour Lifelines:\n");
68     printf("50-50: %s\n", used5050 ? "USED" : "AVAILABLE");
69     printf("Skip : %s\n", usedSkip ? "USED" : "AVAILABLE");
70
71     time_t start = time(NULL);
72
73     printf("\nEnter (1-4), 55 for 50-50, 99 to Skip: ");
74     scanf("%d", &answer);
75
76     time_t end = time(NULL);
77     int timeTaken = (int)difftime(end, start);
78
79     // 50-50 Lifeline
80     if (answer == 55) {
81         if (used5050 == 1) {
82             printf("\n You already used 50-50!\n");
83             i--;
84             continue;
85         }
86         used5050 = 1;
87
88         printf("\n 50-50 Lifeline Activated!\nRemaining Options:\n");
89         printf("%s\n", options[i][fifty1[i - 1]]);
90         printf("%s\n", options[i][fifty2[i - 1]]);
91
92         printf("\nEnter your answer: ");
93         scanf("%d", &answer);
94     }
```

```
    // Skip Lifeline
    if (answer == 99) {
        if (usedSkip == 1) {
            printf("\n Skip already used!\n");
            i--;
            continue;
        }

        usedSkip = 1;
        printf("\n Question Skipped! Moving to next...\n");
        continue;
    }

    // Check Answer
    if (answer == correctOption[i]) {
        correct++;
        printf("\n Correct Answer!\n");
        printf(" Time taken: %d seconds\n", timeTaken);
        printf(" Money Won: %ld\n", prizeMoney[correct]);
    } else {
        printf("\n Wrong Answer!\n");
        printf("Correct Answer was: %d\n", correctOption[i]);
        break;
    }

    line();
    printf("\nGAME OVER!\n");
    printf("Total Correct Answers: %d\n", correct);
    printf("Total Money Won: %ld\n", prizeMoney[correct]);
    line();

    printf("\nThank you for playing KBC, %s!\n", name);

    return 0;
}
```

#OUTPUT

```
***** WELCOME TO KAUN BANEGA CROREPATI *****
```

```
Enter your Name: ARYAN
```

```
-----  
Hello ARYAN! You have 2 lifelines:
```

```
1. 50-50 (Removes 2 wrong options)
```

```
2. Skip Question (No loss, move to next question)  
-----
```

```
Q1: Which planet is known as the Red Planet?
```

- 1. Earth
- 2. Mars
- 3. Jupiter
- 4. Venus

```
Your Lifelines:
```

```
50-50: AVAILABLE
```

```
Skip : AVAILABLE
```

```
Enter (1-4), 55 for 50-50, 99 to Skip: 2
```

```
Correct Answer!
```

```
Time taken: 112 seconds
```

```
Money Won: 1000
```

```
Q2: Who is the father of C Language?
```

- 1. Dennis Ritchie
- 2. Bill Gates
- 3. Bjarne Stroustrup
- 4. Charles Babbage

```
Your Lifelines:
```

```
50-50: AVAILABLE
```

```
Skip : AVAILABLE
```

```
Enter (1-4), 55 for 50-50, 99 to Skip: 55
```

```
50-50 Lifeline Activated!
```

```
Remaining Options:
```

- 2. Bill Gates
- 4. Charles Babbage

```
Enter your answer: 1
```

```
Correct Answer!
```

```
Time taken: 18 seconds
```

```
Money Won: 5000
```

#OUTPUT

Q3: Which device measures temperature?

- 1. Barometer
- 2. Thermometer
- 3. Ammeter
- 4. Speedometer

Your Lifelines:

50-50: USED

Skip : AVAILABLE

Enter (1-4), 55 for 50-50, 99 to Skip: 99

Question Skipped! Moving to next...

Q4: Who wrote the National Anthem of India?

- 1. Bankim Chandra
- 2. Rabindranath Tagore
- 3. Gandhi Ji
- 4. Nehru Ji

Your Lifelines:

50-50: USED

Skip : USED

Enter (1-4), 55 for 50-50, 99 to Skip: 3

Wrong Answer!

Correct Answer was: 2

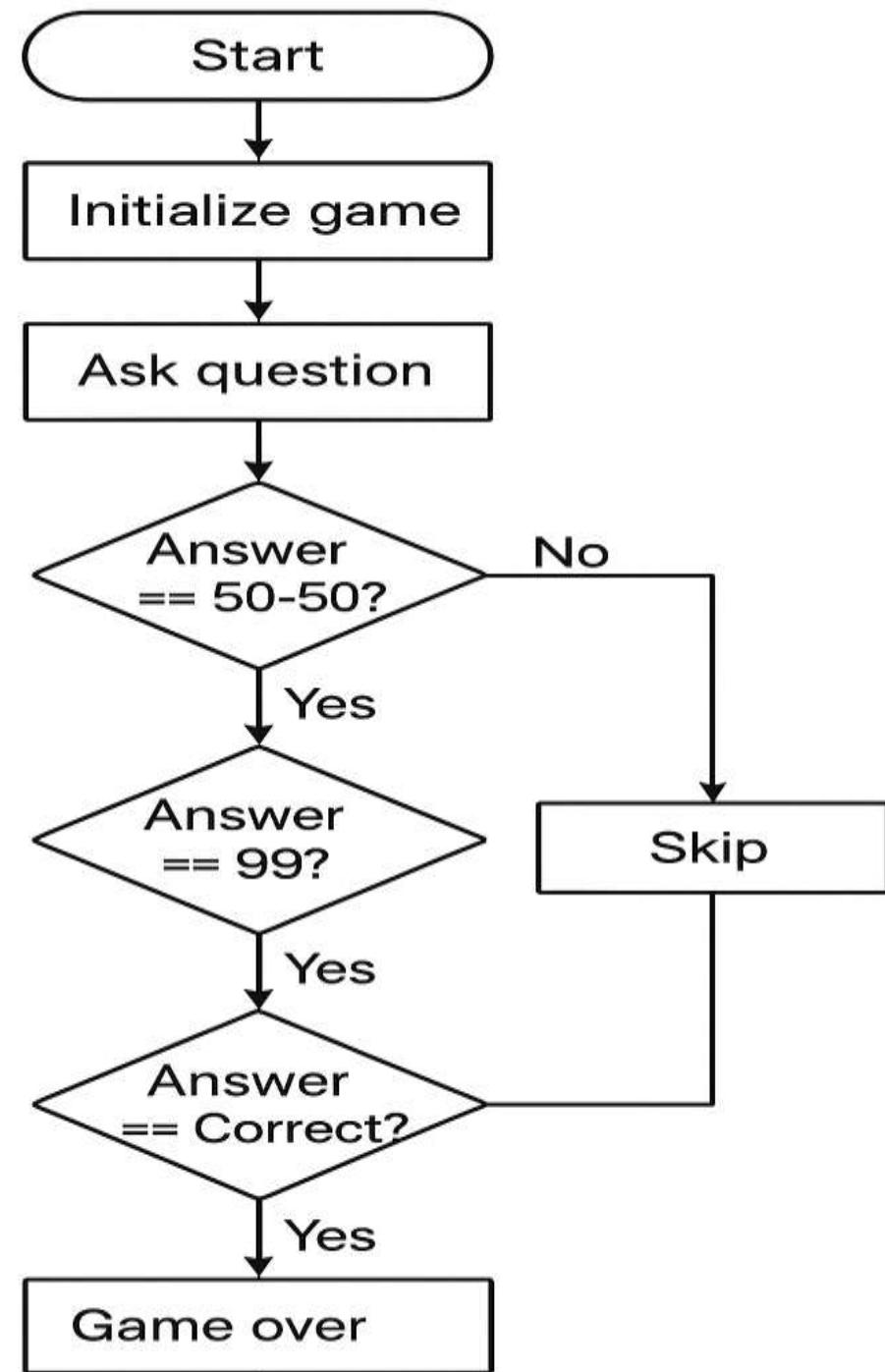
GAME OVER!

Total Correct Answers: 2

Total Money Won: 5000

Thank you for playing KBC, ARYAN!

FLOW CHART:



THANK YOU