

# 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();
```

```
28
29 // 12 Questions
30 char *questions[] = {
31     "Which planet is known as the Red Planet?",
32     "Who is the father of C Language?",
33     "Which device measures temperature?",
34     "Who wrote the National Anthem of India?",
35     "Which is the largest mammal?",
36     "What is the capital of Australia?",
37     "Which gas is used by plants during photosynthesis?",
38     "Who discovered gravity?",
39     "Which is the fastest animal on land?",
40     "Who invented the telephone?",
41     "What is the national currency of Japan?",
42     "Which is the longest river in the world?"
43 };
44
45 // Options for each question
46 char *options[][4] = {
47     {"1. Earth", "2. Mars", "3. Jupiter", "4. Venus"},
48     {"1. Dennis Ritchie", "2. Bill Gates", "3. Bjarne Stroustrup", "4. Charles Babbage"},
49     {"1. Barometer", "2. Thermometer", "3. Ammeter", "4. Speedometer"},
50     {"1. Bankim Chandra", "2. Rabindranath Tagore", "3. Gandhi Ji", "4. Nehru Ji"},
51     {"1. Blue Whale", "2. Elephant", "3. Giraffe", "4. Shark"},
52     {"1. Sydney", "2. Canberra", "3. Melbourne", "4. Perth"},
53     {"1. Oxygen", "2. Carbon Dioxide", "3. Nitrogen", "4. Hydrogen"},
54     {"1. Newton", "2. Einstein", "3. Galileo", "4. Edison"},
55     {"1. Cheetah", "2. Tiger", "3. Lion", "4. Leopard"},
56     {"1. Alexander Graham Bell", "2. Edison", "3. Einstein", "4. Tesla"},
57     {"1. Yen", "2. Won", "3. Dollar", "4. Euro"},
58     {"1. Nile", "2. Amazon", "3. Ganga", "4. Yangtze"}
59 };
60
61 // Correct Answers
62 int correctOption[] = {2, 1, 2, 2, 1, 2, 2, 1, 1, 1, 1, 1};
63
64 // 50-50 wrong option sets
65 int fifty1[] = {1, 2, 1, 1, 2, 1, 1, 2, 2, 2, 2, 2};
66 int fifty2[] = {3, 4, 3, 4, 4, 3, 4, 3, 4, 4, 4, 3};
```

# #CODE

```
58 int totalQuestions = 12;
59
70 for (int i = 0; i < totalQuestions; i++) {
71     line();
72     printf("\nQ%d: %s\n", i + 1, questions[i]);
73
74     for (int j = 0; j < 4; j++)
75         printf("%s\n", options[i][j]);
76
77     printf("\nYour Lifelines:\n");
78     printf("50-50: %s\n", used5050 ? "USED" : "AVAILABLE");
79     printf("Skip : %s\n", usedSkip ? "USED" : "AVAILABLE");
80
81     time_t start = time(NULL);
82
83     printf("\nEnter (1-4), 55 for 50-50, 99 to Skip: ");
84     scanf("%d", &answer);
85
86     time_t end = time(NULL);
87     int timeTaken = (int)difftime(end, start);
88
89     // 50-50 Lifeline
90     if (answer == 55) {
91         if (used5050 == 1) {
92             printf("\n You already used 50-50!\n");
93             i--;
94             continue;
95         }
96         used5050 = 1;
97
98         printf("\n 50-50 Lifeline Activated!\nRemaining Options:\n");
99         printf("%s\n", options[i][fifty1[i] - 1]);
100        printf("%s\n", options[i][fifty2[i] - 1]);
101
102        printf("\nEnter your answer: ");
103        scanf("%d", &answer);
104    }
```

```
        // 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!

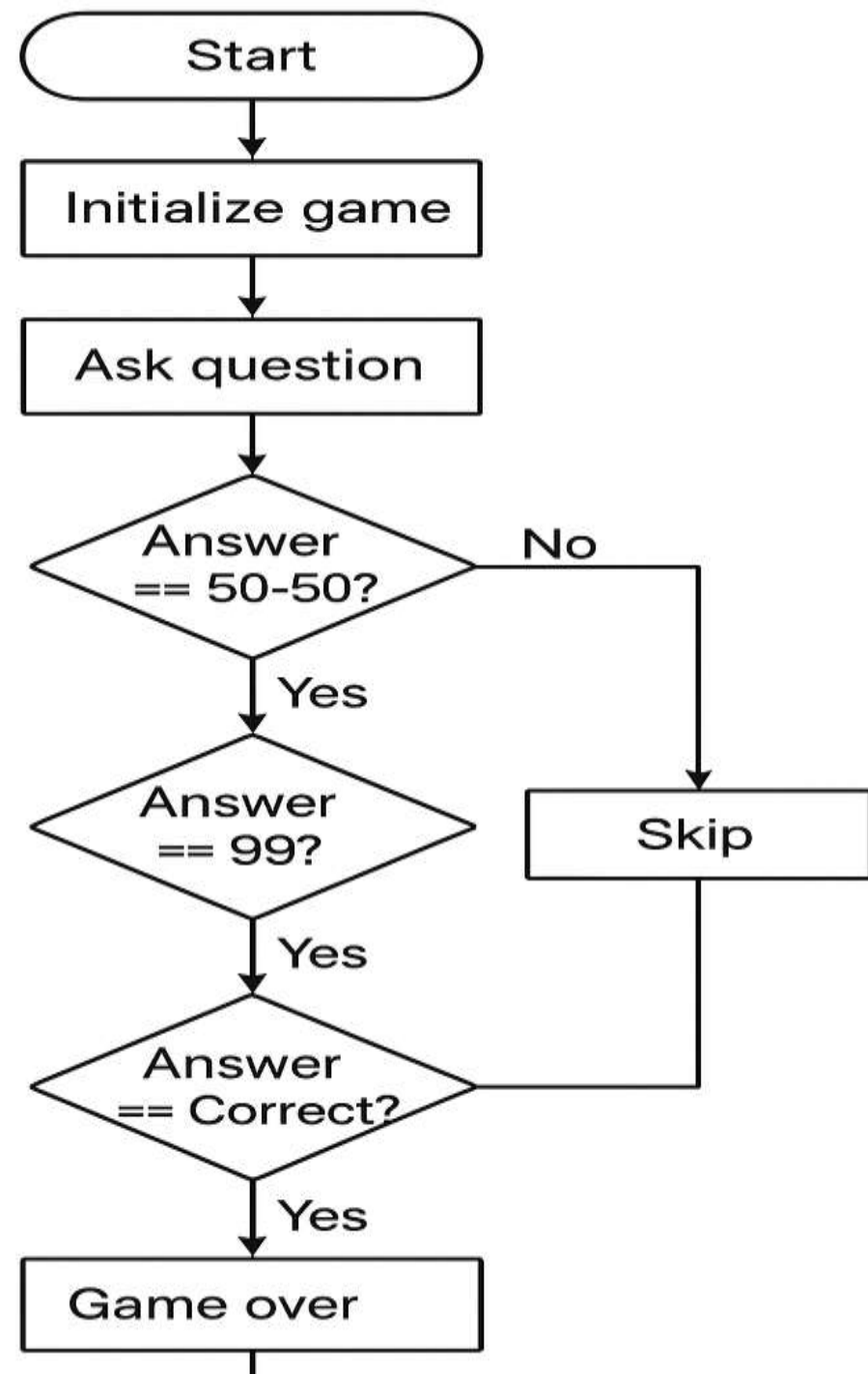
Total Correct Answers: 2

Total Money Won: 5000

-----

Thank you for playing KBC, ARYAN!

# FLOW CHART:



THANK YOU